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THE ROLE OF COMPETITION IN COMMERCIAL AIR TRANSPORTATION

REPORT

OF THE

CIVIL AERONAUTICS BOARD

SUBMITTED TO THE

SUBCOMMITTEE ON MONOPOLY

OF THE

SELECT COMMITTEE ON SMALL BUSINESS

UNITED STATES SENATE

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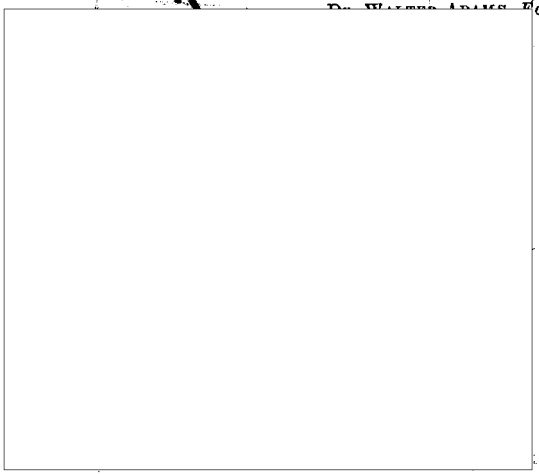

LETTER OF TRANSMITTAL

CIVIL AERONAUTICS BOARD,
Washington 25, August 29, 1952.

Hon. JOHN SPARKMAN,
Chairman, Select Committee on Small Business,
United States Senate, Washington 25, D. C.

DEAR SENATOR SPARKMAN: Your committee has requested that the Civil Aeronautics Board present a study of the role of competition in air transportation, and indicated that the committee is particularly interested in the Board tracing the development of its current approach to competition, with a discussion of competitive opportunities in the future.

In response to this request the Board has prepared and is transmitting herewith a study which it hopes will give the committee the information which it desires in its consideration of this subject matter.

The Board has tried to inform the committee as to the historical development of the air transport system in the United States, and to indicate insofar as possible the present status of the Board's approach to competition in air transportation. The committee will appreciate, of course, that as an agency entrusted with the performance of adjudicatory functions and required to determine many issues only after notice and hearing and upon the record made therein, the Board cannot properly undertake to forecast its actions in matters which presently are or soon may be the subject of formal proceedings before it. Within these limitations, however, the Board has attempted to make known its views and policies with regard to competition in the industry and with respect to the entry of new companies in the field.

The Board also respectfully calls attention to the fact that as an agency comprised of five members, not all of the members necessarily do or have concurred in all of the actions taken by the Board, and indeed some of the present members were not on the Board when many of such actions were taken. This study, for example, contains a number of quotations from various opinions of the Board in which one or more members have dissented from the majority decision. The views expressed did, however, represent the action of the Board acting through a majority of its members at the time such action was taken.

We understand that the procedure of the committee is for its staff to examine the material presented by the agency in response to the committee's request, and to indicate any respects in which they suggest the material supplied could be made more useful and helpful to the committee prior to its final publication. We are, therefore, submitting this draft study at this time with the understanding that if there are suggestions for improvement, they will be made known to the Board and an opportunity given to consider them and to modify the study in any appropriate manner in the light thereof in order to make it as useful to the committee in its work as possible.

Sincerely yours,

DONALD W. NYROP, *Chairman.*

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THE ROLE OF COMPETITION IN COMMERCIAL AIR TRANSPORTATION

I. Introduction

Any appraisal of the role of competition in air transportation must necessarily be made against the background of the Civil Aeronautics Act of 1938 and of the conditions that prompted its enactment. For it is the act which embodies the policy of Congress with respect to the promotion, development, and control of civil aviation. It is the act which contains the general standards and procedures that Congress adopted to effectuate its purposes. And it is within the framework of the act that all actions of the Civil Aeronautics Board must be taken.

By the time the act was passed, commercial aviation, although still a young industry, was becoming established and its potentialities as a commercial instrument and as a factor in the national defense were well recognized. However, conditions in the industry could only be described as chaotic and the financial position of the companies as precarious. The House committee reporting out the bill which after conference became the Civil Aeronautics Act cited as evidence of the depressed state of the industry testimony showing that of the approximately $120,000,000 of private capital previously invested in the airlines over half had already been lost. Under these circumstances there was obviously slight possibility of attracting the new private capital that was essential to any sound development of commercial aviation, and lacking some stabilizing influence and Government financial assistance there was doubt of the industry's survival.

Without attempting a detailed review of the factors that brought about this unhealthy situation, a brief summary of its background helps to explain the conditions Congress was attempting to cope with and its reasons for incorporating in the act the many provisions that have exerted such powerful force on the Board's actions. From 1918 until 1927 air-mail service was conducted exclusively by the Government through the Post Office Department. At the same time it was recognized that this was but a temporary expedient and that mail transportation would be placed in the hands of private operators at the earliest practicable time.

The transition from Government to private operation began following passage of the Air Mail Act of 1925 (the so-called Kelly Act). In broad outline that act authorized the Postmaster General to arrange with privately owned companies for the transportation of mail. However, it contained certain provisions that have left their lasting imprint on the air transportation system and which even today exert their influence on the competitive picture. The first was that the authorization to carry mail should be pursuant to contracts with the

Postmaster General. Although the Kelly Act did not specify that these contracts should be let on a basis of competitive bids, this was the procedure actually followed. The second, which tied in with the first, was that there should be no Government subsidy. This latter provision went so far as to preclude payment for air-mail transportation at a rate exceeding four-fifths of the revenues derived by the Post Office Department from the mail carried irrespective of the actual cost to the carrier for transporting it.

That act evidenced little interest in the economic regulation of air transportation. The contract awards did not take into consideration the ability of a particular air carrier to perform the service, the requirements of the public convenience and necessity, whether a new route logically fitted into the other operations of the low bidder, or whether the award would contribute to the development of a sound route pattern. Moreover, the Kelly Act gave the mail operator no assurance that his operations might not at any time be duplicated by the nonmail services of some other carrier and afforded no protection against unfair or predatory competitive practices.

The product of these factors was, as might be expected, a route system that in many respects lacked the integration necessary for commercial success. At the outset of the change from Government to private operation, many of the requests for bids were passed over by the private operators with the result that for 2 years after passage of the Kelly Act there was the anomalous situation of the Nation's commercial air transportation system being operated in part by private enterprises and in part by the Government directly. Even those routes which were bid on by and awarded to private operators were let at rates so low in many instances as to preclude profitable operations. Later air mail acts corrected many of the deficiencies of the Kelly Act. However, weaknesses remained. Equally important, as the industry developed and matured, the carriage of passengers began to assume a major role. It became apparent that existing legislation keyed solely to the transportation of mail was inadequate and obsolete.

This was the situation with which Congress was faced when it undertook its study of the proposals for comprehensive legislation designed to govern commercial aviation. Here was an industry small by whatever standards applied, but essential to our national well-being. Here was an industry carrying out vital functions at pay in many instances less than the cost of rendering the service. Here was an industry smacking, in many respects, of the traditional public utility but subjected to few of the statutory responsibilities normally imposed upon such companies and enjoying few of the benefits or protective measures usually granted them. Finally, here was a vital industry threatened with collapse. The situation was made even more acute by the fact that the problem was not merely an economic one, but carried with it grave implications from a standpoint of safety. It is generally recognized that in the transportation field financial stability and safety of operations go hand in hand. However, in no other form of transportation are the two so interrelated as in aviation. The Senate Committee on Commerce in reporting its final aviation bill recognized this interplay when it stated that—

> [c]ompetition among air carriers is being carried to an extreme, which tends to jeopardize the financial status of the air carriers and to jeopardize and render unsafe a transportation service appropriate to the needs of commerce and required

in the public interest, in the interests of the postal service, and of the national defense.

In order to meet this situation and bring about the stabilization needed to enable the industry to terminate its financial losses and attract the investment capital necessary for its continuance and development, Congress discarded most of the theories of prior aviation legislation and enacted a comprehensive regulatory scheme which had as its keystone the principle of regulated competition between air transport enterprises dedicated to the public service and assisted during their developmental period by the Federal Treasury. The plan which evolved recognized the status of air carriers as public utilities and in major respects the provisions of the act embodied principles which had been evolved through the years in the regulation of public utility enterprises in other fields.

Following the pattern of other laws governing public utilities, the act granted the air transportation companies certain benefits and protective provisions but in return imposed upon them numerous obligations designed to insure safe and adequate service. However, in at least one important respect Congress departed significantly from the traditional pattern of public utility regulation. In prescribing the standards to govern the fixing of compensation for the carriage of mail Congress did not stop at the usual requirement that rates be set at a level that would compensate the carrier for its costs and yield it a fair return on its investment. It went beyond this and directed the Board in setting the rate of mail pay to take into consideration—

the need of each such carrier for compensation for the transportation of mail sufficient to insure the performance of such service, and, together with all other revenue of the air carrier, to enable such air carrier under honest, economical, and efficient management, to maintain and continue the development of air transportation to the extent and of the character and quality required for the commerce of the United States, the postal service, and the national defense.

The impact of this so-called "subsidy" provision of the act was to give the public an even more direct and immediate interest in preventing excessive and "cutthroat" competition in air transportation than it had with respect to other utilities.

The basic administrative tool provided for controlling competition was the power of the Board to grant or deny economic operating authority in the form of a certificate of public convenience and necessity to be issued only after public hearing, such power being granted in conjunction with a statutory prohibition against engaging in air transportation without such authority. In order to supply standards to guide the Board in carrying out its responsibilities, Congress included as section 2 of the act a "Declaration of Policy" which provided that—

In the exercise and performance of its powers and duties under this Act, the Board shall consider the following, among other things, as being in the public interest, and in accordance with the public convenience and necessity—

(*a*) The encouragement and development of an air-transportation system properly adapted to the present and future needs of the foreign and domestic commerce of the United States, of the Postal Service, and of the national defense;

(*b*) The regulation of air transportation in such manner as to recognize and preserve the inherent advantages of, assure the highest degree of safety in, and foster sound economic conditions in, such transportation, and to improve the relations between, and coordinate transportation by, air carriers;

(*c*) The promotion of adequate, economical, and efficient service by air carriers at reasonable charges, without unjust discriminations, undue preferences or advantages, or unfair or destructive competitive practices;

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(*d*) Competition to the extent necessary to assure the sound development of an air-transportation system properly adapted to the needs of the foreign and domestic commerce of the United States, of the Postal Service, and of the national defense;

(*e*) The regulation of air commerce in such manner as to best promote its development and safety; and

(*f*) The encouragement and development of civil aeronautics.

At the same time the act, recognizing that commercial aviation problems were such as to call for some flexibility in using this tool, vested in the Board certain power to grant exemptions from the regulatory requirements of title IV where compliance would be unduly burdensome on the air carrier because of the limited extent of its operations or the unusual circumstances affecting them and would not be in the public interest. This exemption power has been used in a number of cases as a means of authorizing new air transportation—in some instances competitive with that already in operation. Nevertheless, the background of the act and its specific provisions leave no doubt that Congress envisaged a system of controlled competition under which no new service could be inaugurated under ordinary conditions except after certification predicated on a finding that under the standards of the act such new service was required by the public convenience and necessity.

It is equally clear that Congress was aware of the desirability of healthy and sound competition as a factor in the development of an air transportation system adequate to meet the public need. The declaration of policy specifies that the Board shall consider as being in the public interest and in accordance with the public convenience and necessity "competition to the extent necessary to assure the sound development of the air-transportation system." Section 408 governing the approval of proposed consolidations, mergers, and acquisitions of control expressly prohibits approval of such proposals "which would result in creating a monopoly or monopolies and thereby restrain competition or jeopardize another air carrier" not a party to the proposal. Section 409 requires Board approval of interlocking relationships between air carriers. Section 411 forbids unfair or deceptive practices and unfair methods of competition. Section 412 requires Board approval of pooling and other cooperative working agreements.

The upshot of the congressional policy embodied in the act was not to prohibit the entry of new companies into the air transportation field or the inauguration of all new services by existing carriers. It was, however, to restrict the unfettered inauguration of additional services, whether by existing carriers or new operators, and to permit them only if the contribution that such services would make in meeting the public needs and in developing an adequate air transportation system outweighed the detrimental effects that would flow from them. The Board recognized this intention to strike a balance between conflicting considerations when in 1940, in its first decision disposing of a request for the right to undertake a new service, it stated:

[I]n the light of these standards, it was not the congressional intent that the air transportation system of the country should be "frozen" to its present pattern. On the other hand, it is equally apparent that Congress intended the Authority to exercise a firm control over the expansion of air transportation routes in order to prevent the scramble for routes which might occur under a laissez faire policy. Congress, in defining the problem, clearly intended to avoid the duplication of transportation facilities and services, the wasteful

competitive practices, such as the opening of nonproductive routes, and other uneconomic results which characterized the development of other modes of transportation prior to the time of their governmental regulation (*Northwest Air, Duluth-Twin Cities Operation*, 1 C. A. A. 573, 577 (1940).

II. The Competitive Problem and Board Policy

The role that devolved upon the Board under the scheme of regulation established by Congress was that of maintaining an equilibrium between the two basic policies contained in the aet—that of controlling the air transport industry along the traditional lines of public utility regulation and that of promoting and fostering air transportation. The first required the application of restrictions on proposals for new service in order to avoid excessive and deleterious overcompetition. The second called for development of the industry to meet the needs of a Nation which from its early days has recognized the great importance of its transportation and communications facilities. This latter responsibility, as stated by the Board in one of its decisions, requires—

more than mere attainment of adequate service under protective regulations; it demands improvement and achievement through developmental pioneering.

The task assigned the Board was not a simple one. Although Congress recognized the defects of the Federal regulatory policy under the Air Mail Acts, and apparently realized that a strong and adequate air transportation system could not be produced under a scheme which awarded routes piecemeal by competitive bidding without regard to public convenience and necessity considerations, the relative ability of the bidders to render the required service, or any thought of the development of a long-range program for establishing a sound route pattern it did not make a complete break with the past. On the one hand, it provided that operators in existence on the effective date of the act which had rendered continuous and adequate service for a specified period of time should be granted certificates of public convenience and necessity upon proof of that fact only and without regard to the many other public interest considerations that were established as the test of whether additional services should be established in the future. On the other hand, in an effort to insure some security of franchise rights and achieve that stability which was essential to the passage of the carriers from the chaotic state into which they had fallen to a sound condition, Congress did not authorize the Board to compel route realinements of major character. As a result, the Board from its inception was faced with a ready-made, and in some respects illogical route pattern that it was powerless to change in any substantial manner except upon the initiative or with the consent of the carriers themselves, many of whom naturally have felt that these changes were not in the best interest of air transportation as a whole. This has meant that the Board has not only been required to make the difficult decision of whether new services should be established, but that it has also been faced with the much more difficult problem of how it could authorize needed additions and obtain a balanced air transportation system within the framework of the existing pattern.

A second factor that has played a substantial role in the Board's approach to the question of authorizing additional competition has been the requirement of the act already referred to that mail rates be fixed at such a level as to enable air carriers under honest, economical,

and efficient management to maintain and continue the development of air transportation to the extent and of the character and quality required by the three major objectives of the act. The cost to the Public Treasury in the form of subsidy mail pay imposed by this provision, the realization that the authorization of subsidy payments was intended only as a necessary prop during the developmental phases of the industry, and the conviction that the incentive of air carriers, like other private enterprises, to render maximum service in both quantity and quality increases with the attainment of self-sufficiency required the Board in all of its deliberations and decisions to take account of the effect of new competitive services on existing carriers and on their movement toward self-sufficiency.

Another economic fact is that the unit costs of air carriers respond directly to the primary operating factors of (1) length of traffic haul and average distance between stops; (2) density of traffic; and (3) volume of operations. For example, a carrier which is required to stop every 50 miles to pick up 10 pounds of mail and express and 3 passengers will have much higher unit costs than a carrier which stops every 300 miles and, at each stop, picks up 150 pounds of mail and express and 10 passengers. The impact of these factors is graphically illustrated by the Board's study directed to the administrative separation of subsidy from total air-mail payments to domestic air carriers. After placing the various carriers in groups based on their costs, the Board found that the service mail rate, i. e., compensation for the cost of carrying the mail and reimbursement for related costs, including a fair return on the investment used in the mail service, varied from $0.45 per ton-mile for American, Eastern, TWA, and United, to $7.26 per ton-mile for the local service carriers showing the highest unit costs.

In view of the foregoing the Board has necessarily had to take into account the fact that effective competition can exist only between carriers who are so constituted that inherently they have comparable unit operating costs. Moreover, since the size and character of the markets served by the carriers—a matter controlled by their route structures—have a primary influence on the unit costs which they can attain, the Board, in order to bring air transportation to the greatest number of people at the lowest possible price, had to keep ever in mind the necessity of insuring to each carrier a system of sufficient size to take advantage of the lower costs of volume operations.

These are not, of course, all of the matters that have affected Board policy. They do, however, point up the diverse and complex considerations—sometimes almost irreconcilable—that have had to be weighed in resolving the conflicting claims and requests presented to it by existing air carriers seeking additional authorizations and new companies desiring to enter the field of commercial aviation. In attempting to strike a balance between the various factors that must be considered in deciding whether a proposed new service would carry out the purposes of the act the Board throughout its existence has made many policy pronouncements on the role of competition and on the principles that control its actions in meeting the competitive problems thrust upon it. In so doing the Board has repeatedly adverted to the following criteria as factors which, when balanced, are determinative of the question of whether a new service should be authorized:

(1) Whether the new service will serve a useful public purpose, responsive to a public need;

(2) Whether this purpose can and will be served as well by existing lines or carriers;

(3) Whether it can be served by the applicant without impairing the operations of existing carriers contrary to the public interest; and

(4) Whether the cost of the proposed service to the Government will be outweighed by the benefit which will accrue to the public from the new service.

Although the Board has consistently recognized the congressional policy contained in the act favoring sound and healthy competition, it has also recognized that in determining whether new services will bring about such sound competition the weight to be given the various factors that must necessarily be taken into consideration will vary depending on the facts of each particular case. It has therefore not attempted to spell out any rule that can be applied to every case with mathematical precision.

In any event, the real test of an agency's policy on competition would appear to be not its general pronouncements but rather the actual results from a competitive standpoint that have come about under its decisions. It is to tracing these results of Board action that the remainder of this study is directed. A review of them establishes beyond question that the actions of the Board throughout its existence have favored and promoted competition and that under its decisions competition in air transportation has increased greatly. In fact, the Board has frequently been charged with authorizing an unwarranted amount of new competition to the detriment of the ends sought to be achieved by the act and of the sound development of the air transportation system. So intense did these criticisms become in 1947 and 1948 when the situation of the airlines showed a marked deterioration that a substantial portion of the Board's presentation before the President's Air Policy Commission and before congressional committees was devoted to answering the highly critical charges that the authorization of excessive competition was largely responsible for the existing state of the industry.

III. Domestic Passenger Service

The transportation of passengers still constitutes the major portion of the total domestic airline business despite the phenomenal growth in the transportation of cargo by air that has occurred since the end of World War II.

Competition in the air-passenger field encompasses a number of different problems—competition among the certificated trunk-line carriers and between them and other operators by air; competition among certificated local service carriers and between them and other air carriers; competition among the noncertificated, irregular air carriers and between them and other air operators; and competition between the various classes of air carriers engaged in the passenger business and surface carriers. These various aspects of competition in the passenger field are considered in this chapter.

CERTIFICATED TRUNK-LINE CARRIERS

There has been no clear delineation of the difference between certificated trunk-line and certificated local service carriers, other than the

technical distinction that the former may render service between the points they are authorized to serve without restriction, whereas the latter are required to serve each (or at least a specified number) of points on every trip operated over one of their route segments. Nevertheless, there is a significant difference between them from a practical standpoint. Furthermore, the trunk-line carriers themselves are far from a homogeneous group. Some of the smaller, regional trunk-line operators have numerous basic characteristics more closely allied with the larger local service carriers than with the largest trunk lines. The divergence in size alone gives a clear picture of the variation within the category of trunk-line operators. During 1951 American Airlines, the largest of the trunk-line carriers had domestic nonmail revenues of $149,855,469. Northeast, the smallest of the trunk-line carriers, had nonmail revenues of only $5,846,879 for the same period. Despite these differences, the trunk-line carriers constitute a specific group that has long been recognized as a distinctive class in the regulatory process. Under these circumstances, all of the so-called trunk-line carriers will be considered as a group for the purposes of this review.

At the time the act was passed in 1938, the domestic air-transport industry was virtually limited to the 18 carriers who were subsequently issued certificates of public convenience and necessity under the "grandfather" provisions of the act. Even at that early date, these carriers were offering a substantial volume of service over a fairly comprehensive route pattern. However, the situation that existed then gave but a small indication of what was to come, for bolstered by the stability imparted to the industry by the new congressional policy there began an era of growth and expansion that far exceeded the expectations of all but the most optimistic aviation enthusiasts.

During 1938 the domestic trunk-line operators carried 1,197,100 passengers a total of 479,843,978 revenue-passenger-miles. Passenger revenues amounted to approximately $25,000,000. By the end of 1951 the number of revenue passengers had grown to 20,604,927 annually, revenue-passenger-miles had risen to over 10,000,000,000 and total passenger revenues had increased to approximately $570,000,000. During the same period the number of points authorized to be served by these carriers increased from 240 to 416, and total route mileage (including duplication over competitive segments) from approximately 39,000 to over 130,000 miles, a significant portion of it representing competitive mileage.

The growth in competitive services in the field of certificated trunk line passenger services has not been accompanied by the entry of new companies into that phase of the air-transportation business.[1] On the contrary, the total number of trunk line operators has decreased from 18 in 1938 to 15 today, and as is discussed more fully later, that number may diminish still further as a result of proceedings now pending before the Board in which the possibility and desirability of certain mergers, consolidations, and acquisitions of control are being considered.

Although the Board has never specifically ruled out the possibility of a new company obtaining a certificate of public convenience and

[1] This same situation does not pertain in other areas of civil aviation. A large number of new companies have been authorized to engage in cargo transportation, local air service, helicopter service, irregular transportation, and freight forwarding. These authorizations are discussed later.

necessity to engage in trunk-line passenger services, it did in one of its early decisions awarding a major trunk-line route to an existing operator in preference to a new company point out the obstacles facing applicants seeking their initial certificate for trunk-line passenger services. The Board said:

> In reaching this conclusion we recognize the fact that the considerations which lead us to this determination would be equally applicable in any case in which an existing air carrier is competing with a company without operating experience for a new route or service. The number of air carriers now operating appears sufficient to insure against monopoly in respect to the average new route case, and we believe that the present domestic air-transportation system can by proper supervision be integrated and expanded in a manner that will in general afford the competition necessary for the development of that system in the manner contemplated by the act. In the absence of particular circumstances presenting an affirmative reason for a new carrier there appears to be no inherent desirability of increasing the present number of carriers merely for the purpose of numerically enlarging the industry (*Delta Air et al., Service to Atlanta and Birmingham*, 2 C. A. B. 447, 480 (1941)).

No such company has ever received an award for this type of service and the changes that have been brought about by the Board's actions relating to domestic trunk-line passenger service have resulted from changes in the basic authorizations of the original recipients of "grandfather" certificates. There are many reasons for this situation.

Despite the vital importance of air transportation to the national welfare, the air carrier industry even today is relatively small. As of June 30, 1951, the total investment of the various segments of the air carrier industry were as follows:

Domestic trunk-line carriers [1]	$413,900,000
Local service carriers	11,400,000
International carriers [2]	137,600,000
Large irregular carriers [3]	5,800,000
Total	568,700,000

[1] Includes international/overseas operations of joint service carriers.
[2] Excludes carriers operating joint domestic and international/overseas services.
[3] As of Sept. 30, 1951.

Thus, the total for all air carriers was less than the investment of a single company in many other industries. Under these circumstances, the Board has not yet been faced with the question of whether any of the trunk-line carriers should be scrutinized from a standpoint of "bigness" alone.

Equally important was the fact that under the route pattern produced by the "grandfather" provisions of the act there was a great disparity between the size and strength of the trunk-line carriers themselves. Notwithstanding the various actions of the Board since its establishment designed to strengthen the weaker carriers and bring about a more balanced system, the total nonmail revenues realized by the trunk-line carriers for the fiscal year 1951, amounting to $548,462,000, were divided $390,828,000, or 67 percent, between American, Eastern, TWA, and United, and $157,634,000, or 33 percent, between the remaining 12 companies. This compares with total nonmail revenues realized by the trunk-line carriers for 1938 amounting to $26,499,000, which were divided $22,218,000, or 82 percent, between American, Eastern, TWA, and United, and $4,281,000 or 18 percent, between the remaining 14 companies.

These and other factors compelled the Board to recognize that there was a need as well as an opportunity for bringing about lower unit

costs for all of the trunk-line carriers through an increased volume of operations over soundly constructed routes, and that this possibility offered a feasible means of working toward the dual objective of service to the public at lower rates and decreasing dependence by the carriers on Government subsidy, without a sacrifice of the benefits of competition. They also pointed up the clear fact that many of the trunklines were so small and weak that they not only would have little chance of moving far along the road to commercial self-sufficiency but also would have slight possibility of rendering effective competition to the larger and stronger companies in the markets where a competitive situation existed.

The major techniques that have been used to bring about the new services that have resulted in increased competition have been the award to a carrier of an entirely new route designed to tap a new market or to extend its existing routes, or to add new points in such a manner as to place it in a position to render one-plane or connecting service in competition with an existing carrier or carriers. Similar results have come about through the removal of restrictions preventing a carrier from competing effectively between two points already served by it; the consolidation of routes making possible, in conjunction with aircraft equipment advances, new nonstop services between points already being served by the carrier; and the provision of new through one-plane services by interchange of aircraft.

In authorizing new competitive services point-to-point competition has been avoided other than in unusual circumstances where it has been necessary to make extensions of existing lines to common gateways for the establishment of through long-haul connections. The general approach has been one of terminal-to-terminal competition and has, in essence, resulted in routes providing alternative routings between two major points by competing carriers where there appeared to be sufficient traffic available to support all carriers in the market on an economical basis.

The air transportation system that has come about under the Board's decisions provides intense competition in the major fields of trunk-line passenger activity. This increase in competitive markets is spelled out by the following tables:

Competition between 100 top-ranking pairs of stations, average September 1940–March 1941 and March–September 1950

[Based on ranking by passenger-mile volumes during September 1949 and March 1950]

	September 1940–March 1941		March and September 1950		Increase in percent of competition
	Number	Percent	Number	Percent	
City pairs:					
Total	100	100.0	100	100.0	
Competitive	30	30.0	76	76.0	+46.0
Noncompetitive	70	70.0	24	24.0	
Passenger-miles:					
Total	47,459,000	100.0	308,216,000	100.0	
Competitive	23,475,000	49.5	271,346,000	88.0	+38.5
Noncompetitive	23,984,000	50.5	36,870,000	12.0	

The percentagewise increase in the competitive domestic markets, however, furnishes only a part of the story. The first 25 pairs of points from a standpoint of interstation passenger-miles, despite the large number of combinations possible under a route system rendering trunk-line and local passenger service to 790 communities, account for approximately 30 percent of the total traffic in the domestic airline system. Of these combinations, all but one are now served by two or more carriers.

An important area in which to view the impact of competition is in the field of aircraft equipment, for it has an important effect from the standpoint of both the carrier and the public. Equipment and spare parts comprise a major portion of the capital investment of all carriers, the arranging for the purchase of new equipment is a major consideration in airline finance, and the actual cost of operating those aircraft makes up a substantial portion of total operating expenses. In no other area have more striking changes taken place powerfully affecting the extent of existing competition and, in turn, being strongly influenced by the pressures of competition. In 1938 the total domestic air transport fleet consisted of fewer than 240 aircraft; by 1951 that number had increased to nearly 800. Numbers alone, however, give but a meager glimpse of the magnitude of the changes that have occurred.

The domestic fleet of 1938 was composed entirely of 2-engine aircraft with the most modern ones seating only 21 passengers, with cruising speeds of only some 180 miles per hour, and with a limited range that necessitated frequent landings if a productive operation was to be achieved. Today, the domestic trunk lines, while still utilizing a number of prewar DC–3 aircraft, have a fleet of modern postwar planes ranging from speedy 2-engine craft to large 4-engine aircraft seating up to 80 passengers in air-coach versions, cruising at speeds in the vicinity of 300 miles per hour and regularly rendering nonstop and one-stop service between widely separated points.

The struggle for supremacy in modern equipment began with the introduction by American Airlines in 1936 of the Douglas DC–3. Its institution of service with the then most modern equipment available was shortly followed by the action of its two major competitors in its most important markets, United Air Lines and Trans-World Airlines, and of Eastern Air Lines, the other of the Big Four, in placing identical equipment in service. Almost 2 years elapsed before any of the other carriers made the transition from their existing types of equipment to the DC–3, but by the time the impact of the country's entry into World War II began to make itself felt, all but a handful of the smaller trunk-line carriers were operating DC–3's over at least a part of their routes.

The inauguration of service with this then accepted luxury aircraft did not give rise to any complacency among the domestic trunk-line carriers nor did it slow the search for still better equipment. Then, as now, plans for faster, more comfortable, and more economical aircraft were under way even before the existing models had reached a point of service. By the spring of 1936, the Big Four carriers had already undertaken a part in financing the development of a new,

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four-engine, and by standards of that time, advanced design to replace the DC–3.

War conditions altered the carrying out—but not the approach that prompted it—of these equipment plans. Production turned to war and defense needs alone, and the air carriers instead of receiving the new fleets they had visualized gave up a substantial portion of their equipment already in operation to the Armed Forces. The DC–3 became at the outset the equipment nucleus of the military air transport services. The DC–4, the plane the Big Four carriers had looked forward to in 1936 as their next logical piece of equipment saw extensive military service, and even the Lockheed Constellation, which might be described as the first of the true postwar types ordered by the commercial carriers, operated as a military transport plane during the closing phases of the war.

As the war drew to a close a new upsurge in equipment purchasing got under way. Orders that would have raised the Nation's transport fleet to then almost unbelievable heights were received by aircraft manufacturers for a wide variety of new types. Simultaneously the trunk-line carriers—this time both the largest carriers that had traditionally led the equipment-purchase parade and the smaller carriers that had in the past lagged behind—began a struggle to obtain surplus military planes of the DC–4 type as stopgap transitional aircraft to fill the need for new equipment until postwar designs were delivered.

The sudden decline in airline fortunes in late 1947 and early 1948 immediately dampened the enthusiasm and optimism of not only the trunk-line carriers but of the entire aviation industry. Wholesale cancellation of orders followed. Certain proposed equipment types heralded by the manufacturers and the airlines as epoch-making never reached production stage, and others that are now in operation generally were subjected to severe downward readjustment in production schedules. Yet equipment purchases continued, and again plans for still more advanced aircraft proceeded as they had in the past. Long-haul aircraft of the Lockheed Constellation, Douglas DC–6, and Boeing Stratocruiser types were produced, delivered, and placed in service by both the large operators which before the war were the leaders in equipment development and by the smaller carriers now operating in greatly expanded traffic markets under competitive situations they had never been faced with before the war. The pattern has showed no signs of changing or the search for improved, more advanced equipment of slowing down. Today the carriers are busily engaged in retiring older types of equipment, bringing newer types into service, and placing orders for still newer designs.

A number of factors have unquestionably entered into the rapid and continuous modernization of the airline fleet. The prospect of lower unit operating costs in terms of costs per seat-mile, despite higher costs per airplane-mile in the use of the larger and newer equipment, undoubtedly exerted a major influence. Traffic demands beyond the capabilities of the airlines without additional capacity and the optimism following the war which led to the belief that still greater capacity would be required exerted powerful pressures. Yet, as important as these and other factors not prompted by competitive considerations may have been, the history of equipment purchases leaves little doubt that the stimulus of competition has been in the forefront of the factors influencing airline management in its constant search for

new equipment. Thus, new equipment has traditionally been placed in operation first on the most competitive segments, and the introduction of more modern aircraft by one company on such a route has been followed by a scramble on the part of competitors to introduce with the greatest possible speed comparable or more advanced types. Conversely, the introduction of new equipment has generally lagged the most in services where competition was not a prime influence. Although it is perhaps inevitable that, apart from competitive considerations, the largest carriers would have led the way in equipment advances, it is significant that these carriers operate in perhaps the most highly competitive of the major markets. It is again significant that the smaller carriers which have trailed in the acquisition of new property have promptly developed equipment programs when changes in route structures have placed them in competitive situations with carriers utilizing more modern equipment.

As might be expected the greatest surge in equipment purchases has come during times of optimism when there has been an expectation of greater passenger demand, high load factors, and over-all growth accompanied by the prospect of general expansion of the industry. On the other hand, the acquisition of new-type equipment has not been halted by adverse economic conditions or pessimism over the prospects of the industry in the foreseeable future. What might be termed "luxury" equipment has been introduced at times and under conditions that virtually precluded a conclusion that economic considerations, other than competitive ones, warranted or prompted the action. It seems clear that competition, especially in the postwar period, has been sufficiently widespread and intense to play a major role in the continuous striving of each trunk-line carrier to obtain equipment superior to that of its competitors, and that the impetus afforded by this competition has in large part accounted for there being made available to the public new equipment designed for the utmost in speed, comfort and safety at the lowest operating cost commensurate with the achieving of those three important needs.

Much the same conclusion is indicated by an examination of the flight schedule situation of the trunk-line carriers. The importance of scheduling from the standpoint of the traveling public is manifold. Schedules determine the frequency of services available to the traveler, the space available and hence the ease with which reservations can be obtained, the convenience and comfort of the passenger as affected by such matters as the type of equipment utilized, and the number of stops made en route, the speed of the flights and numerous other important considerations.

An analysis of the interrelation between competition and flight schedules is an exceedingly difficult one due to the variables that must be considered and the factors other than competitive influences that play an important part in the decisions of management with respect to its flight schedules. It is obvious that the volume of traffic available over a particular route necessarily governs the upper limit of the schedules that can be offered. The route structure of the carrier and equipment availability, for example, also play an important role. Moreover, in evaluating the quality of the service offered to the traveling public it is necessary to weigh such factors as time of arrival and departure, speed, etc.

Despite these difficulties, it appears that the conclusion can reasonably be drawn that the increase in competition under the act has, over the long pull, played a part of consequence in bringing to the public improved schedules. Thus the institution by a particular carrier of nonstop and one-stop service in lieu of flights involving landings at numerous intermediate points has prompted the inauguration of comparable flights by competitors. Shifts to more modern equipment on a particular segment have called for similar adjustments by other carriers to meet the competitive challenge. The institution of turn-around schedules has brought forth still more turn-around schedules. Increases in flight frequencies by one company have produced similar increases by its rivals.[2]

Still another yardstick for measuring the adequacy and desirability of what is offered to the passenger, and, hence, for gauging the extent and effect of competition, is that of air fares. It need hardly be stated that fares, which determine the price at which air transportation can be purchased, are of extreme importance. Here, as in the case of equipment and schedules, competition is but one of many factors exerting pressure.

In the beginning days of any transportation enterprise when development and expansion are the prime considerations, the cost of rendering the service is not necessarily a controlling factor. This was particularly true of civil aviation where until recently even the largest, most prosperous carriers were largely dependent on subsidy mail payments. Nevertheless, over a period of time the cost of rendering a service must, except in limited circumstances, act as a floor on decreases in fares, and even in the airline business it has in more recent years been an important determinant.

But cost is not the only consideration which, independently of competitive factors, controls the price level. Managerial discretion as to the most desirable level of fares is necessarily an important influence, and management in the airline industry has displayed a wide divergence of opinion in this field. On more than one occasion the management of one carrier has felt that the wisest move for the welfare of the industry was an across-the-board cut in rates, whereas the management of another has insisted that the situation called for a general increase.

The Civil Aeronautics Board and its policies have also had an important influence on the fare structure and level under the broad powers over the control of rates in domestic air transportation vested in it by the act. The influence of the Board's ideas has been felt, indirectly as well as directly, since with most carriers on subsidy rates the Board's judgment on what the fare level should be may play a part in the conclusions it reaches in mail rate proceedings as to whether a carrier's rate levels meet the tests of economical and efficient management. In addition to these forces, airline fares have been and will in

[2] The impact of competition on the quantity and quality of service offered the public could be illustrated in a number of other ways. For example, those services classified under the heading of "Passenger service," which in 1951 amounted to over $42,000,000 and represented nearly 8 percent of the total operating expenses of the certificated domestic trunkline carriers, have been governed in large part by competitive considerations. Competition unquestionably played an important role in the conflicting views of management during the "airline depression" of 1947 and 1948 on the question of the desirability of free in-flight meals and on the decision of the carriers to continue them, notwithstanding the opinion of a number of carriers that the practice was undesirable. It seems unnecessary, however, to elaborate further on this particular aspect of the competitive picture.

the foreseeable future continue to be affected by the passenger fare levels of the railroads.

One further aspect of fares in relation to competition should be mentioned. The institution of new competitive service has not, in ordinary circumstances, been followed by a reduction in fares on the competitive segment. This is not surprising when the complexities of airline fare structures are considered. The pricing of air service in a particular market is not an isolated transaction that can be consummated without regard to other considerations. On the contrary, the fixing of fares between two specific points is but one aspect of the highly complex problem of establishing system rates between a great many points raising a wide diversity of problems. Nonetheless, it is clear beyond question that competition has been a major factor in determining the level of air fares. Throughout the history of the act competing carriers have equalized fares between points even when economic considerations alone might have called for a higher charge by one of the carriers. General fare decreases by one company have been followed by similar reductions on other lines, despite the belief of the latter companies that the lowering of the level was not economically justified.

The fare picture, therefore, is in many respects similar to that in the field of service. A number of factors unrelated to, or at any rate affected to only a relatively minor extent by, competition have left their mark on airline fares. But like the other situations, competition has exercised a major influence on rates. In 1929 when the air transportation of passengers was in its early stages, fares averaged in the vicinity of 12 cents per mile. This was followed by a rapid decrease in the fare level for several years, followed by a leveling off but still continuous decline until after the entry of the United States into World War II, when at the close of 1941 average fares reached a level of 5.04 cents per mile. Following that, fares began to ascend again, but in 1946, standard fares were reduced to an average of less than 5 cents per mile.

The sudden down-swing in the financial fortunes of the airlines in 1947, brought about, not without considerable difference of opinion among the trunk-line carriers and with strong urging by the Board, a general fare increase to 5.76 cents by the end of 1948. Since then, fares in terms of cents per mile on standard trunk-line services have remained fairly stable and at the close of 1951, amounted to 5.59 cents. Only recently, the Board at the urging of the trunk-line carriers who felt it essential to meet rising costs permitted, temporarily, the application of a flat charge of $1 per passenger for the expense of ticketing, irrespective of the length of haul or other considerations.[3]

[3] The range in standard air fares for domestic trunk-line and local passenger services since 1929 is shown by the following table:

Average passenger revenue per passenger-mile

	Cents		Cents
1929	12.0	1941	5.04
1930	8.3	1942	5.28
1931	6.7	1943	5.27
1932	6.1	1944	5.35
1933	6.1	1945	4.95
1934	5.9	1946	4.63
1935	5.7	1947	5.06
1936	5.7	1948	5.76
1937	5.6	1949	5.76
1938	5.18	1950	5.55
1939	5.10	1951	5.59
1940	5.07		

Thus far, attention has been focused on what is generally referred to as "standard" fares—that is, fares applicable to standard first-class service. However, the air carriers have for many years experimented with special fares. Probably the most widely known of these is the round-trip discount fare. Round-trip discounts were not a part of the domestic airline fare structure at the time the act was passed, and except for a brief period of experimentation in 1945 did not make a general appearance until 1948. Despite wide diversity of opinion on the desirability of putting these special fares into effect at a time when the domestic trunk-line carriers were sorely in need of additional revenues, fares calling for a discount on round-trip tickets were placed in effect generally over the domestic trunk-line network. Since that time round-trip discount fares have continued as an integral part of the Nation-wide fare structure, notwithstanding the continued belief of certain managements that there was no real justification for the fares.[4]

Experimentation has also taken place with other types of special fares. This has taken many forms, including the institution of excursion and "vacation" fares designed to increase off-season passenger traffic on poor segments. Another of the special fares has been the so-called "family fare" plan first introduced by American Airlines in October 1948. Applicable only on certain days of the week when traffic is traditionally low, this fare permits the head of a family after purchasing one ticket at the regular price to buy passage for other members of the family at half-fare. This plan has been adopted generally by the industry and is now in effect on most of the domestic trunk lines.

Even more important has been the development of low-fare coach service. Basically, the theory behind coach services has been that through the operation on the heavily traveled routes of equipment so arranged as to provide the maximum seating density commensurate with safety and passenger acceptance and shorn of all "frills" such as free meals, the service could profitably be offered to the passenger at a fare substantially below that charged for standard services.

The first of the coach fares of the trunk-line carriers was put into effect by Capital Airlines on its New York-Chicago run in November 1948.[5] At the outset, coach services were limited not only to high density routes, but also to equipment that did not measure up to the standards, from a standpoint of passenger appeal, of the newest, most advanced aircraft in operation, and to schedules operated at off-peak hours. Later proposals were made to extend coach service to peak periods and to offer it on schedules flown by the most advanced types of equipment owned by the trunk-line carriers.

After following what might well be termed a "go slow" policy in the early period of the development of coach services by the domestic trunk-line carriers, the Board in late 1951 announced its policy on coach services. In substance, that policy called for a rapid and widespread extension of coach services with equipment having high density

[4] In its recent order permitting the $1 passenger surcharge to go into effect, the Board simultaneously refused to permit the elimination of the lower round-trip fares pending formal investigation thereof.

[5] From the time of their large-scale entry into air transportation at the close of World War II, the irregular air carriers in their passenger services have established fares substantially lower than the standard fares of the certificated carriers. However, the discussion here is limited to the certificated carriers. The role played by the irregular carrier in the development of coach services is discussed in a later section.

seating at rates below the prevailing 4½ cents per mile coach fare then in effect. The policy also encouraged the establishment of coach operations without the requirement of high density seating on flights departing at off-peak hours, at fares of 4 cents per mile or less.

The growth in traffic over the domestic trunk-line carriers under special fares in those areas where it is definitely ascertainable has been phenomenal. For example, coach travel from a beginning of slightly less than 100,000,000 revenue passenger-miles in 1949 has increased to over 1,200,000,000 passenger-miles in 1951. Percentagewise this growth has raised coach travel from some 1 percent of total revenue passenger miles to nearly 14 percent.

In terms of cents per mile alone standard fares, despite fluctuations, have increased in the postwar period. However, a consideration of fares using 1947 as the base year indicates that the increase in those fares from 1947 to 1951 has been less than the rise in the cost of living, and that in terms of 1947 dollars standard fares have actually decreased during the period. Also, during that period the carriers, as already pointed out, have established special fares at levels substantially below the level of standard fares. A number of diverse factors have played a part in determining the fare policies of the airlines. Technological advances and improved operating procedures that have reduced unit costs have been a major factor in the pricing of air service. Managerial judgments as to the most desirable fare level have been an influence. Yet giving all reasonable emphasis to these determinants, the fact remains that competition and the striving that is its essence have been major forces in shaping airline fare policy.

LOCAL SERVICE CARRIERS

Certificated local service carriers, or as they have frequently been called, "feeder" carriers, occupy a unique spot in the air transportation system—a place that presents competitive considerations quite different from those associated with the other domestic carriers. Although as far back as 1940, the Board had authorized an operation between numerous small points in the Middle Atlantic States, it was not until 1946, when the Board established two local service systems in the Rocky Mountain States area, that the general authorization of standard persons, property, and mail service on a scheduled basis between the smaller communities of the country began.

Subsequent awards raised to 22 the total number of airlines authorized to operate scheduled local service. Of those 22 carriers, several have already had their operating authority renewed for an additional period, two have had their requests for renewal denied and are no longer operating, and the renewal applications of the remainder are, or will be, before the Board. Taken together, the routes of these new carriers form a system of nearly 28,000 miles, covering virtually every region of the country, linking some 560 smaller communities with each other and with their major trade centers and offering air service to nearby major points where connections can be made with long-haul carriers for movement to other parts of the Nation. By the close of 1951 the local service carriers, with a fleet of approximately 150 aircraft, were producing approximately 290 million passenger-miles and nearly two million cargo ton-miles per year, and their total nonmail revenues had risen to nearly $18 million.

A number of considerations, based largely on the inherent characteristics of local air services, have determined the Board's policy and have shaped its thinking on the role of competition in such operations. Even at the time of the Board's first over-all consideration of local service, *Local, Feeder, and Pick-Up Air Service Case* (6 C. A. B. 1 (1944)), it was clear that with the extensive airline coverage in existence, any general extension of air service to additional communities not already served by the trunk-line carriers would require operations to cities far smaller on the average than the points previously certificated. The extent to which this has come about is demonstrated by Board studies made in connection with its initial consideration of the question of whether certain of the early local certificates should be extended for an additional period of time which revealed that the 187 points receiving only local air service in mid-1948 had a total population of approximately 2,535,000 or an average per station of 13,500. Had all the points then certificated to these carriers actually been served the average population figure for points limited to feeder service alone would have increased to only 18,500. The inclusion of every point then certificated for feeder service (whether served exclusively by local carriers or by both them and trunk-line operators), would have given an average population of not over 85,000, despite the addition of such metropolitan centers as New York and Los Angeles. This meant that local service carriers would be required to tap a market not already sold on air transportation and having only a limited traffic potential under existing conditions. It was also clear that local services by their very nature would be relatively short-haul operations involving numerous stops. An important effect of this situation was described by the Board in the Local, Feeder, and Pick-Up Air Service case, as follows:

> In connection with the relatively low-traffic potential we believe it is desirable to emphasize constantly the fact that in attempting to develop this potential, local air carriers will be competing with the most highly developed rail and highway transportation systems in the world. The highway system not only provides a network of motorbus lines but also the roadway for the private automobile. We must assume that this vehicle will continue to carry the vast majority of all short-haul passengers, as in the past, and perhaps increase the proportion somewhat after the war. The further development of these surface systems will also be intensified with increased emphasis after the war, and they will also reap the benefits of technical developments and improvements. These systems have their greatest utility in short-haul services.
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> The airplane, on the other hand, has had its greatest utility in the longer distance transportation market. In this market its outstanding characteristic of high speed gives it a great competitive advantage, and permits the fullest exploitation of its inherent characteristics. But this inherent competitive advantage diminishes sharply, with conventional type aircraft, as the length of the trip is reduced. Even in the long-haul market its speed advantage becomes less effective as the number of intermediate points at which landings must be made on each flight is increased.
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> Thus, in going into the small-city, short-haul market, the airplane will be faced with the most intense kind of competition, with its principal selling point, speed, greatly diminished in value. While it will still have advantages to offer, the differential in fare that it now appears will be necessary will counter-balance them to some extent. Five cents per mile, the figure generally considered as the prospective passenger fare, is approximately three times the average fare for motorbus transportation * * *.[6]

[6] Other adverse factors that have plagued the local service operators have been the unavailability of suitable aircraft, marked directional traffic imbalance, fluctuations in demand on various days of the week, and an inability to achieve high hourly equipment utilization.

Translated into costs, the combination of short-haul traffic with frequent stops, low traffic density, and limited volume of service could add up to but one thing—a high-cost operation. The real problem, therefore, was not one of insuring competition, but rather of avoiding a dilution of the limited traffic available and the bringing about of still higher costs that might call for prohibitive amounts of Government subsidy.

Under these circumstances, the Board from the outset of its local service authorizations largely avoided the establishment of routes that were competitive with those of other local carriers or of the trunk-line operators. Moreover, in order to make certain that the carriers did not stray from their assigned task of providing local service into the trunkline field, the Board included in the local service certificates restrictions against nonstop and skip-stop operations.

The avoidance of competitive services was not universal. In some instances local service routes were competitive over certain segments with other services. This situation arose not from any belief that the competition was desirable but from the knowledge that in many regions of the country sound local route systems could not be established without including certain points already served by other carriers under their outstanding certificates.

When actual operating results proved the correctness of its initial views, the Board in its first order directing certain local service carriers to show cause why their authorizations should not be extended for an additional experimental period and another to show cause why its authority should not be permitted to expire, expressed its policy on competition in the local service field in clear terms. It there stated:

> From the information now before the Board we are of the general opinion that feeder service should seldom if ever be competitive. The traffic potential is so limited in most feeder territory that duplicate operations by two or more carriers can seldom if ever be economical. We have reached the conclusion that in general where a feeder carrier's route is duplicated by a trunk-line carrier and such route is not necessary to the trunk-line carrier's operation, then such route should be served by the feeder carrier alone. Conversely, where a route is a necessary and integral part of a trunk-line carrier's system and essential to its economical operation, then such route should not be served by a feeder carrier. Where two feeder carriers substantially duplicate service between certain communities, then the feeder routes should be adjusted to avoid such duplication. Of course, these general objectives cannot be achieved immediately in many cases and may not be possible to fulfill in particular situations, but they represent salutary principles which are of importance in working out the appropriate relationship between our feeder carriers and the other certificated carriers (*Southwest Airways Co., Pioneer Airlines, Inc., and Trans-Texas Airways Show Cause Order (Order Serial No. E–2680, dated April 4, 1949).*)

The decision to readjust routes in a manner calculated to strengthen the local operators and bring about a steady lessening of the difference between their commercial revenues and expenses, accompanied by a reduction in the subsidy outlay of the Government, has been applied in all subsequent feeder renewal cases. Submarginal stations, even where their only air service came from local operators, have been dropped from the local service routes, trunk-line carriers have been suspended at points served solely by them and the points added to the route of a local operator, and in the case of points certificated to both a trunk line and local carrier which could not support two services one of the carriers has been suspended. Proposals for similar changes are before the Board at the present time in a number of pending pro-

ceedings and the process of selective route readjustment will continue on an experimental basis in the future as the facts establish the desirability of changes in building the strongest commercial air transportation system possible.

In only one respect has the Board's policy of reducing uneconomical competition among the local service carriers and between them and the trunk airlines called for action that might conceivably be considered as increasing competition. In an effort to bring about greater traffic density and lower costs, the Board in a number of instances has relaxed the requirement that local service carriers on each flight stop at every point. This condition was originally imposed for the purpose of making certain the carriers concentrated on developing the local services for which they were certificated rather than on attempting to compete in the trunk-line field. Many of the more recent local service certificates have substituted for the older type restriction the requirement that on each segment the carrier stop at a minimum number of points, but less than the total number included on the segment. Yet in doing this it is clear that the Board has carefully restricted the freedom of the carrier to avoid the conversion of the service from a local to a trunk-line operation and any undue increase in competition. To the limited extent that competition may have been increased by this course of action, it has been an unavoidable byproduct of the basic objective.

The policy of the Board on competition as regards the local service carriers does not represent any change in its basic philosophy of competition or in its belief that sound and economical competition has been and can be a powerful force in stimulating the development of a strong air transportation system capable of meeting the needs of the country. Nor does it mean that the local service carriers lack the incentive which competition supplies. Competitive situations between the local operators and other air carriers still exist and will continue to do so in a number of areas. For example, in an effort to obtain traffic from the trunk-line carriers, many of the local service operators have established competitive fares between competitive terminal points, with the result that system fares, in terms of cents per mile, are lower for the local carriers than for the trunk-line carriers. Also, even though it is difficult to measure with mathematical preciseness, there is no question but that the competition of surface transportation exercises a substantial influence on the local air carriers. The sole import of the policy is that because of the nature and characteristics of local air transportation at its present stage of development, there are only extremely limited areas in which competition can be economically justified. Under these circumstances, the inclusion of the promotion of competition as an element of local service policy could only have threatened the entire experiment with destruction.

Although the authorizations to local service carriers have had no appreciable effect on the over-all competitive picture, they have been highly significant in connection with the question of the extent to which new companies should be permitted to enter the field of air transportation. Unlike its actions in authorizing new trunk-line passenger services domestically, which so far have been limited to existing carriers, the Board has with few exceptions turned down the requests of trunk lines for authority to conduct local services. In so doing the Board has pointed out that it did not believe that the

operating experience of the trunk line should be a controlling factor in the choice of a carrier since the systems of those companies were devoted primarily to providing trunk-line air transportation. The services visualized by the local authorizations were of an entirely new type gauged to meet the needs of small communities and with relatively short hauls. In view of the limited traffic potentialities of the points on the new systems the Board concluded that an unusual effort would be required to develop the maximum traffic and that greater effort and managerial ingenuity might be expected from an independent local operator whose continuation in the air transportation business would be dependent upon the successful development of traffic on the local routes alone and the operation of those services on an adequate and economical basis. It further concluded that as between non-trunk-line applicants applying for authorizations to conduct local services, the task should be entrusted to persons whose interests were centered in the local area to be served, since such persons would have the greatest incentive to promote a truly local service in the most economical manner consistent with safety of operation.

As a result of these conclusions, the operation of all of the local air service systems that have been established has been entrusted to new companies never before engaged in scheduled air transportation under the provisions of the act, having their roots in the areas in which they were to operate. This approach was later carried over to the field of helicopter operations, and each of the three helicopter routes that have been set up has been awarded to a new company.

IRREGULAR AIR CARRIERS

One of the most difficult problems that has confronted the Board in relation to competition in air transportation has been that of the place which nonscheduled or irregular air carriers should occupy in the Nation's air transport system.

Nonscheduled or irregular common carrier operations by aircraft are not new. From its beginning in 1938 the Board recognized that there was a group of carriers which, although engaging in air transportation as common carriers and therefore subject to the economic regulatory provisions of the act, conducted their business in such a way that they could not comply in any substantial measure with those provisions and continue to operate. These carriers during the prewar period furnished a call-and-demand air service, operating generally from a fixed base and flying where, when, and if requested without regard to any schedule. For the most part, they operated small nontransport-type aircraft and their air transportation services were only incidental to, and a byproduct of, other aviation activities such as the sale and service of aircraft and accessories, flight instruction, and the operation of airports.

While in 1938 the operations of these carriers were of limited economic significance insofar as the air transportation system of the country as a whole was concerned, their very existence indicated a need that could not be satisfied by the larger, scheduled air carriers. It was also clear that their operations were of such a limited extent and were conducted under such unusual circumstances that compliance with the provisions of title IV of the act would have been unduly burdensome on them. The limited nature and indefiniteness of their

services as to time and place made it extremely difficult for them to sustain the burden of prosecuting an application for a certificate of public convenience and necessity, or to satisfy the other detailed requirements imposed upon air carriers generally. It was also obvious that their operations were of a type not susceptible to, or fitting logically into the economic provisions of the act designed primarily to deal with those regular, route-type services that were, and are today, the backbone of an adequate air transportation system.

Accordingly, the Board, relying upon its authority under section 416 (b) of the act which permits it (1) to establish such just and reasonable classifications or groups of air carriers for the purpose of title IV of the act as the nature of the services of such air carriers may require, and (2) to exempt from the requirements of title IV air carriers or classes of air carriers if it finds that enforcement of the provisions of that title would be an undue burden upon them by reason of the limited extent of, or unusual circumstances affecting, their operations, and is not in the public interest, issued in 1938 its so-called nonscheduled regulation.

That regulation exempted from virtually all of the provisions of title IV of the act air carriers which did not engage in scheduled operations. Under the regulation, an operation was deemed to be scheduled if (1) it involved the flight of one or more airplanes from a take-off point in one State (or Territory or possession of the United States) to a landing in another such State, Territory, or possession, or in a foreign nation, and (2) the air carrier held out to the public by advertisement or otherwise that it would operate one or more airplanes between such points with regularity or with a reasonable degree of regularity, and (3) the carrier permitted it to be generally understood that on such flights, and for compensation or hire, it would accept for transportation between such points such members of the public as might apply therefor, or such express or other property as the public might offer.

Although statistics on the operations under the nonscheduled exemption regulation in the early days of the act are meager, it is clear that most of them were of the type that has been described and which the Board visualized in adopting the regulation. World War II changed this. During the war commercial aviation was sharply curtailed. The unavailability of equipment, gasoline shortages, the entry of persons trained in aviation into the Armed Forces, and the other demands of the war effort directed all aviation activities to national defense activities. Despite this, the Board, in order to determine what changes, if any, were required in its regulations, instituted in 1944 an investigation of nonscheduled air services.

The Board recognized in its opinion that the record did not adequately reflect the changes which were taking place in this segment of the industry as a result of the termination of hostilities, and only relatively minor amendments were made in the nonscheduled regulation upon the completion of that proceeding. However, the Board emphasized the limited and sporadic nature of the services that were authorized by the nonscheduled regulation (*Investigation of Non-Scheduled Air Services*, 6 C. A. B. 1049 (1946)).

The growth in the field of noncertificated air transportation following the cessation of hostilities was tremendous. As a result of the war, military personnel and civilians forced to move great distances in

relatively short periods of time had become accustomed to air travel. In addition, many armed service personnel trained during their military service in aviation turned upon their discharge to civilian life to commercial aviation. Their entry into the field of noncertificated operations was facilitated by the large numbers of transport-type aircraft declared surplus by the armed services and available for purchase or lease at only a small portion of the cost at which they could otherwise be obtained.

This postwar expansion was accompanied by marked changes. Unlike the nonscheduled carriers that had operated prior to the war, many of the persons conducting noncertificated operations in the postwar era relied entirely upon revenue obtained from the carriage of persons and property without support from the other aviation activities ordinarily conducted by fixed-base operators. Operations by many of these new companies also showed increasing regularity of flights between fixed points that rapidly reached a stage where they could not, under any reasonable interpretation of the term, be called nonscheduled. Many of these new services were conducted without due regard to the public responsibilities and duties of common carriers and numerous complaints were received by the Board from the public concerning certain of the practices of the nonscheduled carriers.

In order to meet the rapidly changing situation and the new problems produced by it, the Board adopted various measures. In May 1947 it completely revised the nonscheduled exemption regulation. The carriers permitted to operate under that regulation were redesignated as irregular air carriers and were required to obtain letters of registration from the Board, although this did not require any showing of a need for the particular carrier's operations or a showing of fitness and ability. The basic limitation upon frequency of operations which had been implicit in the nonscheduled regulation since its adoption was spelled out in a more detailed and precise form. A distinction was drawn between carriers utilizing small aircraft, who resembled the prewar nonscheduled operators, and those operating the large transport aircraft that had been drawn mainly from the excess of the fleets of the military services, with the latter being left subject to more of the provisions of the act than the former.[7]

By August 5, 1948, 147 companies had been issued letters of registration as large irregular carriers, and of those 109 were still in effect. At that time the Board provided that no further letters of registration would be issued to large irregular carriers unless an application had been filed on or before August 6, 1948. This was followed in May of 1949 by a further revision which terminated the blanket exemption of large irregular carriers but provided that any large irregular carrier which by a specified date filed an application for an individual exemption could continue operations under the limitations of the regulation until its application for individual exemption was disposed of. Thereafter on May 25, 1950, the Board issued its opinion in *Large Irregular Carriers, Exemptions* (11 C. A. B. 609), setting forth the policies that would guide it in disposing of the applications for individual exemptions. Without attempting a detailed review of all of the reasoning underlying these policies they can be briefly summarized.

[7] In this amendment small irregular carriers were defined as those carriers who do not use in their transport services aircraft having a maximum certificated take-off weight in excess of 12,500 pounds for any one unit, or 25,000 pounds for the total of such units.

First, the Board concluded that the applications of irregular carriers that had been conducting route services—services described by the Board as "a pattern of operations which shows a concentration of relatively frequent and regular flights between a limited number of pairs of points"—would be denied. The Board stated:

It has been urged that the fact that these carriers have been able to develop, between cities also served by the certificated carriers, sufficient traffic to support their operations establishes a need for their services. It has also been asserted that the irregular carriers in question have furnished so-called air coach transportation at fares substantially below those charged by the certificated carriers for their standard services, and have not diverted traffic from such services, but rather have led the way in the development of a market for air transportation which otherwise would not have been exploited. But these propositions, even if accepted, do not seem to us to warrant granting the applications with which we are here concerned. As we have previously noted, these irregular carriers have conducted operations with a regularity and to an extent far beyond those contemplated by our regulations and any "need" which may be deduced therefrom would seem to be a need for regular, rather than irregular, services. Such operations are not limited in extent, nor do unusual circumstances appear to be present affecting the operations of the carriers within the meaning of section 416 (b). We are of the opinion that the success of such operations, even if established, is not in itself sufficient to justify authorization by way of exemption. The question of whether there is a need for such services, whether they can be furnished at a profit under full compliance with the provisions of title IV and the safety requirements of the act and the Board's regulations, whether they can and should be furnished by the certificated carriers, and what effect they would have upon the regular operations of the latter raise difficult and complex issues which can be satisfactorily determined only after full hearing upon applications for certificates of public convenience and necessity.

* * * * * * *

We have concluded, after consideration of these matters in the light of the provisions of section 416 (b) and the legislative intent and background of the act, to deny the applications of all large irregular carriers which have been conducting route services. These carriers have consistently disregarded the limitations upon their operations described in the exemption regulation from which they derived their authority, and have been the most frequent violators of other economic and safety regulations of the Board. In these activities they have yielded to the economic temptations which we have noted, and we are of the opinion that they are not to be entrusted with authority which might permit them, in the absence of unremitting and intensive enforcement effort to continue in the same pattern.

Secondly, the Board concluded to grant exemptions to those carriers which in the past had been furnishing truly irregular services. The Board said:

Apparently there is a need for such services. Although the certificated air carriers are authorized by section 401 (f) of the act to conduct special and charter services without regard to the points named in their certificates, they apparently have not, and probably cannot, fully satisfy the uncertain and unpredictable demand for air transportation which is being met by some of the large irregular carriers. Thus the air transportation activities of these irregular carriers to a large extent consist of such operations as charter flights for athletic teams, businessmen's organizations, and similar groups; flights involving unusual and generally nonrepetitive movement of property; and off-route, odd-hour, and emergency flights of passengers and property. The irregular carriers which have entered this market have rendered services which fill, in some respects, the interstices of the certificated route system, and continuation of the operations will have no adverse effect upon the certificated carriers.

Thirdly, the Board in arriving at its policies concluded that:

It must be recognized that the temptation to engage in route operations will continue in the future as to those carriers which receive exemption authority. Indeed, since the number of irregular carriers utilizing large aircraft will be

smaller and the competition between them lessened to that extent, the temptation will probably be greater than it has in the past. Although the carriers which will receive exemption authorization at the present time have conducted irregular services in the past, we nevertheless deem it necessary to impose further restrictions to insure that each such carrier will carry out and perform the type of service which it is our intention to authorize. Accordingly, in addition to the restrictions upon regularity which have heretofore been imposed, we shall permit only three flights in the same direction during any period of four successive calendar weeks between the following pairs of points, and only eight flights in the same direction in such period between any other pairs of cities.

The Board then listed 13 pairs of cities between which the bulk of the operations by irregular carriers had been conducted and between which operations had been characterized by frequency and regularity.[8]

Finally, the Board pointed out that there was a large number of irregular carriers which, although holding valid letters of registration, had not conducted in the preceding year any operations pursuant to their authority. With respect to these carriers the Board concluded that there did not appear to be any need for their services, and that accordingly the applications of all nonoperators would be denied.

As a part of that decision the Board finally disposed of 11 applications pending before it, granting 2, denying 8 for nonoperation, and dismissing 1. Thereafter, the Board continued to process the individual exemption applications on file with it until September 21, 1951, by which time it had granted 17 applications, finally denied or dismissed 33 applications of nonoperating carriers, and was in the process of taking further action on the remaining 46 applications.[9]

The next major step in the regulation of irregular carriers came on March 2, 1951, when the Board issued a special exemption authorizing unrestricted operations by large irregular carriers pursuant to military contracts and the establishment of joint representatives at military bases to arrange for flights of uniformed military personnel traveling at their own expense to or from military bases. Also, the Board approved two organizations of irregular carriers, the Aircoach Transport Association and the Independent Military Air Transport Association, for the purpose of representing such carriers before the executive branch of the United States Government and in order that the irregulars' equipment, personnel, and services might most expeditiously be utilized by the Department of Defense. The military exemption has since been extended by the Board and is still in effect.

This was the situation in the regulation of large irregular carriers on September 21, 1951. On that date the Board issued an order instituting a general investigation of air services by large irregular carriers and irregular transport carriers (Docket No. 5132, Order Serial

[8] In order to place the carriers granted individual exemptions and those still operating under the provisions of pt. 291 of the regulations on an equal footing the Board followed this action with an amendment of pt. 291 that added the so-called 3 and 8 limitation to the regulation. The effective date of the amendment was postponed several times at the request of the Small Business Committee and before it became effective a United States district court, in a suit brought by two large irregular carriers, held the amendment invalid as having been promulgated without observance of proper procedures. An appeal from this ruling is still pending in the courts.

[9] Actually the Board issued a number of orders during that period denying applications on the ground that the applicants had conducted route-type operations. However, the orders of denial expressly provided that if a petition for reconsideration were filed within a specified period the order would not become effective until the petition was acted upon. Since each operating applicant that had received an adverse decision had such a petition undisposed of before the Board on the date it suspended further processing of the applications, none of the operating carriers lost their authority by the Board's actions on their exemption applications.

No. E–5722). As stated by that order, the reasons underlying the investigation were as follows:

> Although from time to time since the adoption of the original "nonscheduled" exemption in 1938 the Board has considered the status of irregular transport operations in rule-making and other proceedings and has altered the conditions under which such services could be conducted, no formal investigation involving hearings with respect to the services performed by the irregular air carriers and irregular transport carriers has occurred since the issuance of the Board's opinion on May 17, 1946, in Docket No. 1501 (6 C. A. B. 1049). In the interim, there have been numerous and significant changes in conditions affecting air transportation and the place of noncertificated operations in the air-transportation system. It therefore appears to be desirable to institute a general investigation to obtain further and current economic and other information in order that the Board may determine its further policy with respect to large irregular carriers and the irregular transport carriers.

The investigation was directed to all matters related to and concerning air transportation conducted by irregular carriers, including an inquiry into the issue of whether there is "a need for the air-transportation services now conducted by the irregular carriers in addition to and supplemental to services performed by the carriers holding certificates of public convenience and necessity." The investigation also included numerous subsidiary issues such as, if such supplemental services were found to be required what type or types of service would best meet the public need, whether such services should be authorized by certificate of public convenience and necessity or by exemption, etc.[10]

The scope of the issues in the investigation were further particularized by subsequent Board orders. In response to certain motions that were in part directed to clarifying the scope of the investigation proceeding, the Board on January 8, 1952 (Order Serial No. E–6017), defined the nature of the services it would consider in the proceeding as follows:

> The Board's purpose in this proceeding is to obtain a record on the basis of which it can determine whether it should authorize, either by exemption or certificate of public convenience and necessity, air transportation by the large irregular carriers and irregular transport carriers. It is our desire to receive evidence upon such issues as (1) whether the Board should establish a new class of carriers; (2) whether any such class should be permitted to conduct operations in air transportation that may be far greater in scope than those authorized under part 291 of the economic regulations; and (3) whether we should issue authorizations based on an area, frequency, volume, type of service, or fare-structure concept. On the other hand, we do not intend that this proceeding will include a consideration of proposals for the same authority as is now held by the regularly certificated carriers. * * * Consequently, we will in this proceeding consider only service that is limited or controlled in such a manner as to assure that it will be additional and supplemental to the presently certificated service and not a mere duplication of such service.

This position was spelled out still further by the Board's order of April 17, 1952 (Order Serial No. E–6336), dealing with the consolidation of certain applications into the general investigation. Pertinent here is the Board's statement that—

> The Board finds that many of the applications request authority to engage in air transportation without regard to its additional and supplemental character. Our

[10] The Board in its order reopened all of the applications for individual exemption theretofore granted and consolidated them, the individual exemption applications then pending on reconsideration, and the applications as of that time still unacted upon, with the investigation. At the same time the Board issued another order in which it amended the individual exemption orders of the irregular transport carriers by eliminating temporarily from their authorizations the "3 and 8" limitation. In substance, this latter action was intended to place all carriers holding authority to conduct irregular operations, whether pursuant to the exemption of part 291 or individual exemption in an equal position.

order of January 8, 1952, shows that the purpose of this proceeding is to consider the needs for services that are limited or controlled in such a manner as to assure that they will be additional and supplemental to the presently certificated service and not a mere duplication of such service. * * * [A]s we indicated in our order of January 8, 1952, we intend to consider operations far greater in scope than those authorized by part 291 of the economic regulations and it is not contemplated that consideration will be restricted to nonscheduled or irregular transportation services. Any other proposal for limited or controlled additional and supplemental service can be considered. For example, evidence will be received on the need for additional and supplemental service limited to a specific number of flights between the same pairs of points during a particular period, or for such service limited to flights that have a very high load factor, or for such service limited to casual, occasional, or infrequent flights. The Board does not attempt to specify with exactness all the means by which the additional and supplemental service here involved may be authorized if found needed, but, rather, we leave to the parties the opportunity for suggestions that will come within our general definition of the issues.

The institution of this general investigation and the temporary suspension of any further processing of the individual exemption applications did not portend a cessation of enforcement activities against those irregular carriers which continued to flaunt the provisions of the exemption regulation under which they were operating. The exact opposite was true, for simultaneously with its order setting in motion the general investigation the Board issued a press release containing its enforcement policy. In substance it stated that the Board had reviewed its enforcement policy with respect to the irregular carriers and had concluded that it could not condone violations of the act or the Board's regulations pending disposition of the proceeding in the general investigation. The Board stated that it would proceed with the enforcement of the existing requirements in the usual manner; that is, (1) by giving violators warning and an opportunity to achieve voluntary compliance with the act, or (2) by applying to the United States district courts for injunctions, or (3) by issuing cease-and-desist orders, or (4) by revocation, or (5) by a combination of these remedies.

Although a determination of the future role of the irregular carrier in air transportation as the operator of services supplementing those of the certificated airlines must await decision in the general investigation now pending, the Board's policy with respect to their operation of scheduled domestic passenger services practically identical with those of the certificated carriers except for the level of fares has more nearly crystallized. This policy is set forth in the decision of the Board in the Transcontinental Coach-Type Service case (Order Serial No. E–5840), decided November 7, 1951.

In that case the Board denied the applications of several irregular carriers requesting authority by certificates of public convenience and necessity or exemption orders to engage in air-coach services on transcontinental routes without limitation as to the number of schedules which can be operated. In pertinent part the Board stated:

The question whether the public interest will be served by the further development and extension of low-fare air transportation may be disposed of without extended discussion. We believe that the applicants are right in emphasizing the importance of this question to the national interest. In the opinion of this Board progressively lower fares must be considered a major objective and natural incident of any new transportation development. Unless air transportation can be brought within the reach of the many people of limited means, it will not be able to fulfill its obligation to the American people. Indeed, there could be no

justification for a national policy which has poured millions of dollars of the people's money into the building up of a vast air-transportation system if that system were to be permanently restricted to persons of means and denied to the masses of the people.

* * * * * * *

The successful coach operations, to date, stem from increased volume and increased load factors stimulated by fare reductions and newly created national emergency traffic. This development, in most cases, has been accompanied by an increase of the seating density of the airplane. It is an axiom of business enterprise that a reduction in price stimulates an increased demand for a useful product. The operators of air-coach services, both certificated and irregular, have proved this in much the same manner in which it has been proved in many other fields of business endeavor. It becomes clear, then, upon the simplest analysis of the problem, that air-coach service involves a decision as to the appropriate pricing of one of the natural products of airline operations. Basically this poses, not a new route or new service problem, but a rate problem—a decision as to what fares should be charged. In the present case, we are called upon to decide whether the public interest requires that we create a new group of air carriers who will charge lower fares, and at the same time be relieved of the traditional public-service obligation of serving communities which can only be served at a loss.

* * * * * * *

The applications here under consideration propose the operation of certificated air services over routes and between points where at least three and in some instances as many as five certificated carriers now operate. An essential element of their proposals is the limitation of operations to the choice segments of the transcontinental routes from the standpoint of traffic-generating capacity, and service only to the mass markets connected by those segments. The low fares at which the applicants propose to operate would be attainable, in large part, by reason of the fact that they would be operating in the most lucrative markets over route segments selected to produce the maximum economies and profit.

Our national air-transportation system must of necessity provide service at cities showing varying degrees of attractiveness from a traffic-generating standpoint and individual route segments must include some points that are below the optimum in profitability. These variations exist not only in the system as a whole, but in the system of each individual carrier. They are especially pronounced in the more extensive systems of the transcontinental carriers.

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The diversionary impact of such services on both the present and potential traffic of the existing transcontinental carriers is clear from the record. The applicants admitted that the new services would divert traffic from the existing carriers but did not undertake to estimate the amount of such diversion. They contended that the new traffic which would be generated by the lowering of the fares would bring to the existing carriers more traffic than they would lose. No evidence was offered in support of this claim which stands in the record as the expression of an opinion. The interveners, on the other hand, offered estimates of the losses which they would sustain through competition with the low-fare services that would be operating over their most profitable route segments, free of any obligation to serve the less fortunate cities. These estimates, which do not appear to be unreasonable, indicate that the diversion from the existing carriers would be substantial and serious.

Whatever the fact may be as to the net effect of the proposed competition upon the existing carriers, it must be recognized that the extension of low-fare, or coach, transportation would bring into existence an additional market, a substantial part of which would be made up of persons who have not previously traveled by air and would not have done so if the low-fare service had not been available. The recognition of this fact, however, does not warrant the conclusions which the applicants have drawn from it. The real question concerns the air pattern which is to serve the new market. To the extent to which it is not presently being tapped by the existing carriers, this new market represents potential revenues which, in direct proportion to the penetration of that market, will be available for the further extension of the benefits of low-fare service to the lean routes and poorer traffic cities. If the potential revenues are to be diluted by the participation of too many carriers, attainment of this objective would inevitably be thwarted. We cannot escape the conclusion, therefore, that the introduction of new carriers, operating unlimited air-coach services as here pro-

posed, would constitute a serious threat to the future orderly progression toward cheaper air transportation for the Nation as a whole.

* * * * * * *

The facts, in our opinion, do not support the claim that the further development of low-fare transportation requires the authorization of a group of specialists. The reduction of fares is a natural incident of air-transport development. It is the logical result of economies that have come from the use of more economic equipment and improved operating methods. The technological know-how required for a passenger service certainly does not vary with the level of fares charged or the seating density of the airplane. Moreover, the examiner's careful analysis of the cost evidence in the present record shows that the applicants cannot operate the services they propose at a unit cost appreciably lower than the cost at which the presently certificated carriers could operate comparable services. It is our conclusion, therefore, that the existing carriers are fully capable of providing the scheduled regular and frequent air-coach services needed between the points which they are already serving, and that they have the necessary resources and facilities to insure the further growth and development of such low-fare services.

The Board accordingly denied the applications insofar as they sought unlimited authority, but deferred them for consideration with the general investigation insofar as they requested irregular or limited authority.

Even though the irregular carriers were not originally visualized as competitors to any real extent of the scheduled lines, and whatever their place may ultimately be in the transportation of passengers by air, there is no escaping the fact that up to the present time they have been a significant force in the competitive picture. Although this competitive impact has extended to both the passenger and cargo fields and to operations domestically, between the United States and its Territories, and between the United States and foreign countries, it has not been felt uniformly in all areas. For example, it appears that in the cargo field the competitive influence of the irregular carriers has been less important in the domestic than in the international field.[11] Nearly three-fourths of the cargo ton-miles generated by the irregular carriers during 1951 were accounted for by the international operations. And since the Board's exemption regulations conferred no authority to conduct passenger operations in foreign air transportation, the competitive influence on passenger services has necessarily been limited to operations within the United States and between it and its Territories.

On the whole, large irregular carriers have concentrated their flights on the most important route segments between the heaviest traffic-producing points and have devoted an overwhelming part of their efforts to the lucrative long-haul traffic. For example, out of a total of 16,189 flights (including those for the military) operated by large irregular carriers and irregular transport carriers during 1950, 52 percent were over five route segments, and 65 percent were over 11 segments. The remaining flights were widely scattered. Under this pattern of operation it necessarily followed that in such high-density, long-haul market as New York-California and New York-Miami, to mention only two, services by irregular carriers would be competitive instruments to be reckoned with. As a correlative, it also followed that between a much greater number of points served

[11] This was not the case, of course, with respect to the noncertificated cargo carriers who after operating pursuant to exemption for a time were awarded certificates in 1949. Their role in the development of domestic air cargo is discussed later.

by the scheduled carriers which suffered from the dual drawbacks of low density and short haul, irregular air-carrier operations would have only slight direct competitive effects.

There is no indication that their competition has exerted any important pressure toward the development of new and improved equipment. With minor exceptions, the transport equipment utilized by them has consisted of surplus military aircraft, many of them of the type relied on heavily by the certificated trunk-line carriers in the early postwar era as transitional aircraft. Even today, the large irregulars do not operate aircraft of as advanced design as those utilized by the certificated trunk lines in the major competitive markets. Much the same situation exists in the other areas where competition as to service might occur.

In the field of air fares, however, the situation is different, and there the influence of the irregular carriers has been strongly felt. From the beginning of their operations, a substantial number of the irregular air carriers have concentrated on operating nonluxury services in the high-density markets at fares substantially below the standard fares of the certificated carriers. Although there has been a substantial variation between the level of fares charged by the different irregular carriers, the fares of the irregular group at the end of 1951 averaged some 65 percent of the standard fares of the certificated carriers.[12] The irregular carriers, by operating in markets, under conditions, and at times when high-density seating could be realized and, consequently, lower fares charged, helped to bring about the development of low-fare coach services of the type that have accounted for the largest portion of the recent growth in domestic passenger business of all air carriers. Such low-fare coach services have served as a competitive stimulus to the certificated carriers in the low-cost field, and, together with the coach services of the certificated carriers, have induced many persons to travel by air who would not have utilized air services at the higher standard fares. The extent to which the operation of these low-cost services on frequent schedules has enabled the irregular carriers to penetrate the passenger market is indicated by the fact that during the first 9 months of 1951 they carried some 440,000 revenue passengers and flew 742,000,000 revenue-passenger-miles in domestic and international operations.

The competition that the irregular carriers have offered is not limited to competition with the certificated carriers. In addition, they have fought strongly among themselves for the available low-cost market. Although this latter competition has extended to some extent to all irregular operators, it has on the whole had its strongest influence with respect to a relatively few of the irregular carriers, since of the total noncertificated carriers operating passenger services a limited number have accounted for the bulk of the business. In 1950, the 5 largest operators accounted for 45 percent of the revenue-passenger-miles operated by all irregular carriers and the largest 10 accounted for approximately 65 percent of the total.

The problem facing the Board under this situation has been to evaluate the beneficial and detrimental results that have in the past

[12] This spread in fares is substantially reduced if the comparison is made with the coach fares of the certificated carriers, and on this basis irregular fares averaged approximately 90 percent of the certificated carriers' charges on those segments where coach service was offered.

flowed from irregular air-carrier operations and that may be expected to result in the future, and on the basis of that evaluation to bring about a scheme of authorizations that will promote a sound air-transportation system. On the basis of the record before it in the Transcontinental Coach-Type Service case the Board, as already pointed out, concluded that the benefits that would stem from a general authorization to the noncertificated applicants in that case to conduct unlimited transcontinental coach services were not sufficient to outweigh the detrimental effects that the authorization would have upon the air-transportation system as a whole. The question of the nature and extent of the authorization that should be granted to the irregular carriers to conduct supplementary services falling short of unlimited operations similar to those conducted by the certificated carriers is now pending in the large irregular investigation where the opposing parties will have an opportunity to present evidence upon which the Board can base its decision.

In conclusion, it should be pointed out that, despite frequent statements to the contrary, the Board's actions have not all been directed to restricting the scope of operations of the irregular carriers nor have its policies resulted in economic strangulation of the irregular carrier industry. The military exemption previously referred to represents a substantial authorization. Reports filed with the Board by the Air Force covering military contract movements indicate that during about 9 months of 1951 the large irregulars received revenues of $20 million for domestic passenger and cargo contract movements, the Atlantic and Pacific airlifts, and international and Alaskan contracts. Although the Board has no precise information as to the revenues derived by the large irregular carriers from the transportation of "furlough" traffic (as distinguished from contract movements) it is clear that such revenues amount to several million dollars a month.

Between 1950 and 1951, the irregular carriers, as a group, increased their gross revenues from $35,019,000 to $67,082,000, an increase of 91 percent. Their net worth increased from $4,129,000 in 1950 to $5,452,000 in 1951, or 32 percent and their net profit before taxes from $830,000 to $3,764,000, an increase of 353 percent. These large increases took place within a 1-year period, and indicate that the irregulars as a class have been prospering. In large measure, it is believed, the Board's action in permitting the large irregulars to carry military traffic has accounted for their increased prosperity.

Of the 57 large irregular and irregular transport carriers reporting gross revenues for 1951, 15 reported gross revenues in excess of $1,000,000; 15 reported revenues between $500,000 and $999,999; 20 reported gross revenues between $100,000 and $499,999; and 7 reported gross revenues below $100,000. The net worth of 12 carriers was minus, and the net worth of 17 carriers was below 25 percent of their total assets. The remaining carriers had a net worth in excess of 25 percent of their total assets.

IV. Domestic Air Cargo Service

From the standpoint of American aviation one of the most important results of World War II was the stimulus it gave to the development of the transportation of cargo by air. As far back as 1928 certain of the air carriers then operating had entered into a contract

with the Railway Express Agency (then known as the American Railway Express) pursuant to which the agency undertook to handle for them the transportation of property by air. Under this agreement, the air carriers would specify the rate to be charged and would perform the physical movement of the express; REA would handle pick-up and delivery and most of the other service functions. Subsequently, when the act was passed and the carriers were granted "grandfather" certificates, their authorizations included the right to engage in the air transportation of property as well as persons and mail. Except for limited and on the whole unsuccessful experimentation in air cargo transportation, the transportation of property by air pursuant to the certificate authorizations continued until 1944 to be handled exclusively by REA under the agreements between the carriers and Railway Express.

There was a steady growth in the volume of air express during the prewar period, with express ton-miles increasing from 2,182,420 in 1938 to 5,258,551 in 1941. During the same period express revenues rose from $1,278,164 to $2,919,003. Nonetheless, the high rates for air express, averaging in the vicinity of 60 cents per ton-mile, coupled with only limited acceptance of the possibilities of the movement of property by air confined the express business generally to small shipments and kept it as a relatively minor part of the total air traffic. For example, in 1941, the express revenues of all carriers amounted to only $2,919,003, or 3 percent of their total revenues as against 71.7 percent for passengers, 23.3 percent for mail, and .8 percent for excess baggage.

The certificated carriers were not entirely unmindful of the possibilities of air freight, and as early as 1941 set up an organization for the specific purpose of undertaking a research program looking into all phases of air freight transportation, such as air and ground equipment requirements, rates and tariffs, potential shippers, etc. However, major attention continued to be focused on the development of the passenger market, and freight received scant consideration.

The demands of the war for the rapid movement of immense quantities of freight to distant points, many of them not accessible by any other means, ushered in a new era in cargo transportation. The military air transport services operating both directly and through contracts with the certificated airlines set up a globe-encircling network of routes and undertook what was to become an air freight operation of staggering proportions. Aircraft designed originally for passenger service were modified to meet the specific requirements of air cargo operations. Experimentation and improvisation brought about new cargo methods and procedures. With cost a consideration secondary to the prime concern of supporting the military demands of war, the period saw the movement of heavy, bulky articles which before the war, even had their transportation been economically feasible, would in many cases have been prohibited by the space limitations of the cargo compartments of the combination passenger-cargo planes then in use by the airlines.

Equally important, these extensive operations produced a large pool of men trained in the air-cargo field and convinced that there was available a tremendous commercial air-cargo potential to be tapped and that this market made economically feasible the operation of large-scale commercial air-cargo services. Also, operating under the de-

manding time schedules of the war, manufacturers and other prospective air-cargo shippers began to become aware of the advantages of moving their products by air. This commercial aspect of the picture is portrayed by the fact that from 1941 to 1945 air express carried by the certificated lines in their commercial operations increased seven times.

The rush to enter the air-transportation field that occurred in the later days of the war following the release of trained aviation personnel and the making available of surplus military aircraft at bargain prices has already been referred to. Many of these persons concentrated on passengers, while others turned to both passengers and cargo. But another large group devoted itself exclusively to the transportation of cargo. Within only a short time, there had been added to the certificated carriers authorized to engage in the air transportation of property, a large number of new operators (conducting their services on what were or purported to be either a nonscheduled or a private carrier basis) concerned wholly, or at least in large part, with the transportation of cargo alone.

By 1947, a number of these new carriers had filed applications requesting certificates of public convenience and necessity authorizing them to engage on a scheduled basis in the air transportation of cargo only. On May 5, 1947, the Board adopted, simultaneously with its amendment of the so-called nonscheduled exemption redesignating operators under that regulation as irregular air carriers, another exemption regulation setting up a new group of operators defined as noncertificated cargo carriers. This new classification, which was limited to the noncertificated carriers with applications on file with the Board for cargo-only certificates, authorized the exempted carriers to engage as common carriers in the transportation of property only, without restriction or limitation as to regularity or frequency of service.

The regulation recognized that in view of the size and complexity of the Air Freight case into which the applications for domestic cargo certificates were consolidated some time would elapse before the Board reached its decision. It further noted that the services being rendered were in the public interest and that a broader operating authority was needed to avoid, among other things, "the probability of dissipation of the operating staff and experience of such carriers, interruption of operations, loss of revenues, and probable loss of part of their capital funds" during the pendency of the certificate proceeding.

The increase in air-freight business under the postwar stimulus was almost unbelievable. From 1946 to 1948, domestic air freight rose from a practically nonexistent state to 116 million ton-miles for both the certificated air carriers and the noncertificated cargo carriers that were parties to the Air Freight case, excluding almost 30 million ton-miles of air express handled by REA under the uniform express agreement. Although reliable statistics on the cargo operations of the nonscheduled carriers at that time are unavailable, the inclusion of the results of their property service would undoubtedly increase this figure considerably.

The certificated carriers did not leave the air-freight field entirely to the noncertificated carriers. As early as October 1944, American Airlines had filed its first air-freight tariff and had begun to exert its efforts to full-scale entry into the air-freight field. Other carriers

were slower in setting up freight tariffs and it was not until July 1945, that the next of the certificated carriers, TWA, filed its first air-freight tariff. The other airlines gradually followed suit and by August 1947, all of the domestic trunk-line carriers were offering air-freight service.

Whether the failure of the certificated carriers to move into the new air-freight field with the promptness and on the same scale as the noncertificated carriers be attributed to a shortage of equipment and the pressing demands for more passenger service, to a lack of interest in the freight field as long as passenger business continued to be so promising, or to both of these, the fact remains that during 1947 the noncertificated carriers parties to the Air Freight case carried 45 million ton-miles of air freight as against approximately 39 million ton-miles for the 16 certificated trunk-line carriers. By 1948 the certificated carriers had intensified their efforts in the cargo field and had surpassed the noncertificated cargo carrers, hauling 70 million ton-miles as against 45,500,000 ton-miles for those noncertificated carriers. However, the bulk of the certificated carriers' freight traffic was handled by only two carriers.

The competition between the various carriers engaging in air freight operations during this period was extremely intense, and it became clear that many of the rates for cargo were established wholly on the basis of competitive considerations without due regard to costs. As a result, what threatened to become a full-scale rate war in the freight field got under way. Reduced rates by the noncertificated carriers were followed by still greater reductions on the part of the certificated operators. In mid-1947 the Board, disturbed by these developments, while refusing to suspend certain new freight tariffs filed with it by the certificated carriers, instituted an investigation into the lawfulness of the rates. In October of the same year the Board again refused to suspend still lower tariffs filed by the certificated carriers, but ordered an investigation of these tariffs along with the earlier ones already under consideration. Shortly thereafter, when still lower tariffs were proposed by certain carriers, the Board suspended the new proposals, and after that suspended all additional competitive freight rates below the level in effect at the end of October.

After public hearing on the various rates, the Board on April 21, 1948, issued its opinion in which it established a minimum level of freight rates below which no tariff could be set except with the special permission of the Board (*Air Freight Rate Investigation* (9 C. A. B. 340 (1948)). These minimums were established at 16 cents per ton-mile for the first 1,000 ton-miles of any one shipment and 13 cents per ton-mile for all ton-miles in excess of 1,000 of any shipment. In that opinion the Board, after pointing out the unreasonable relationship between the rate level and costs, said:

> * * * The rates of the certificated carriers are lower than those of the noncertificated carriers for shipments of weight categories constituting a large proportion of the total freight traffic. This condition, together with a general level of rates below cost, would eventually lead to the financial inability of the noncertificated carriers to remain in operation. While it is highly important that the carriers' freedom to exploit the potentialities of air freight be protected to the fullest extent, and that no avoidable restrictions be placed on such freedom, the destructive aspects inherent in the present and proposed tariffs dictate that some effective regulatory action be taken.
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The services which are covered by the rates under investigation in this proceeding are for the most part highly competitive. Many of the certificated carriers compete with each other for the same traffic, a condition which is also true of the noncertificated carriers. In addition, every operation of the noncertificated carriers is in direct competition with one or more certificated carriers. Virtually the only rates under investigation applying to noncompetitive traffic are for services to relatively small points on the routes of the certificated carriers.

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The evidence reveals that an unsound competitive condition exists in the air freight industry in the United States. This is particularly true as regards the transportation of freight between the large cities where a number of the respondent carriers have established rates unjustified on economic grounds, with the result that some of such carriers are incurring substantial operating losses. There is danger that as the result of the diminishing revenues from air freight transportation, which is being occasioned by these rates, the transportation services of some of the respondent carriers will be seriously affected and may be curtailed or cease to exist. Certainly the ability of respondent carriers as a whole to provide adequate, economical, and efficient transportation of property has been impaired and will be impaired increasingly unless we take prompt action to halt the progress toward destructive rate competition.

In our judgment, the current situation in the air freight industry requires the immediate promulgation of a general minimum-rate order setting a floor below which no rate may go without express approval of the Board * * *.

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While we have fixed the minimum rates at a sufficiently low level to permit extensive experimentation with promotional rates and value of service considerations above the rate floor, there may be particular situations where the general rate which we have prescribed would be so restrictive as to interfere with the proper development of the air freight industry. It is not our intention to freeze rates in this early developmental period nor to outlaw competitive rates, but merely to prevent the financial stability of the industry from being imperiled by unrestricted competitive pressures which drive the rate structure generally to unremunerative levels * * *.

Although the Board in an effort to permit the carriers to cope with a marked directional unbalance in their freight operations has from time to time permitted specific rates below the minimum there specified, the rates established have remained in effect over-all.

The cargo development of the immediate postwar era culminated in the Board's decision of July 29, 1949, in the *Air Freight Case* (10 C. A. B. 572) in which the Board issued certificates of public convenience and necessity authorizing three noncertificated carriers to engage in the sheduled transportation of property only over two transcontinental routes, a route between California and the Pacific Northwest, and a route between the Northeast and North Central sections of the country, on the one hand, and the Southeastern States area, on the other. The Board's decision, while based primarily on the need for obtaining full development of the air cargo potential and of authorizing all cargo carriers in order to provide a yardstick of efficiency and costs, also recognized the importance of the competitive influence in stating:

During the period of growing operations by some of the applicants as scheduled cargo carriers under section 292.5 of the Board's Regulations, the air freight carried by the certificated carriers increased tremendously. It is neither possible nor necessary to determine whether this growth must be credited primarily to the spur of competition provided by the cargo carriers, or whether the growth would have occurred without them. In either event, the existence in the field of cargo carriers is likely to provide a continuing spur of competition to presently certificated carriers.

As might have been expected, the services of the new certificated cargo carriers operating side by side with the domestic trunk-line carriers entitled to subsidy mail pay soon gave rise to the question of the extent to which the passenger, property, and mail carriers should be supported with mail pay in their competitive struggle with the new companies for air cargo. This problem was first considered by the Board in its decision in *Braniff Airways, Inc., Mail Rates* (9 C. A. B. 607 (1948)). The Board resolved the question before it in the following language:

> In the tentative statement we indicated that since the act made no distinction between cargo and passenger service we would underwrite losses incurred in both cargo and passenger operations. However, we indicated that, as in the case of passenger service, losses which are sustained through the establishment of uneconomical rates or from the operation of capacity in excess of reasonable requirements will not be recognized for mail-rate purposes.
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> It has been urged that with respect to the underwriting of air freight losses there should be a distinction between all-cargo service and combination passenger service on the ground that, unlike passenger service, the all-cargo service has been developing satisfactorily independently of support and therefore section 406 of the act does not authorize assistance to the all-cargo service through mail pay for developmental purposes. Although this contention warrants serious consideration, it is not at all clear at this stage that subsidy payments are not needed, at least during a developmental period, to insure the proper development of the air-freight industry by making a regular all-cargo service available to population centers of close proximity. The record of the noncertificated carriers indicates that it might be possible to conduct an all-freight service profitably on a long-haul-basis between a few large cities, though up to the present time all of these carriers have sustained losses. Even if the transportation of air cargo between the more widely separated traffic centers would not require support for development, the carriage of freight on all-cargo planes for shorter hauls between the points along a certificated route may require support for proper development.
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> The argument is that the doctrine of the Board's tentative statements puts Government funds behind the certificated carriers in their competitive struggle with the unsubsidized noncertificated cargo carriers. This, it is said, destroys the right to compete on fair and equal terms and will encourage certificated carriers to adopt an unsound cargo-rate structure. However, the Board is not helpless to deal with competitive abuses or unsound rate structures. Indeed, minimum cargo rates were fixed by the Board in the recent air-freight-rate investigation to prevent destructive rate competition. Here it is clear that the alleged dangers do not obtain, as the rates of Braniff are substantially above not only the minimum rates which are prescribed but the rates charged by the competitive noncertificated carriers.
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> Nor does our decision to underwrite a minimum schedule here indicate that we will underwrite schedules above a minimum service pattern. Indeed, since property service is already available to certificated points in combination planes the carrier would assume a heavy burden of proof in justifying the underwriting of all-cargo service in excess of a minimum service pattern.

This same reasoning was followed subsequently in fixing mail rates for two of the smaller carriers, Delta Air Lines and Capital Airlines. However, more recently in its tentative statement fixing rates for American, United, TWA, and Eastern, the Board distinguished the reasoning it had applied to the smaller carriers from that it was applying to the Big Four stating:

> We also find that the Big Four, including TWA and United, have sustained losses in their all-cargo operations and that such losses should not be underwritten with mail pay. While we recognize the difficulties in arriving at the precise amounts of such losses, we cannot accept the suggestion that the way to

arrive at the cost of such services is via out-of-pocket costing. We do not believe that our decision not to underwrite all-cargo losses here is inconsistent with our conclusions in the Braniff, Delta, and Capital cases to underwrite for these carriers a minimum pattern of service. On the basis of the over-all pattern of the Big Four, the aggregate capacity operated in their combination services, the extent and strength of their routes, and the extent of their competition with nonsubsidized cargo carriers, it would not be in the interest of the developmental purposes of the act to cover such losses. In reaching this conclusion, we have considered that, unlike the situation of the smaller carriers, the development of the domestic air freight markets of the Big Four would not be seriously restricted by our decision. We are inclined to believe, as a matter of fact, that the decisions of the Big Four in expanding (or curtailing) their all-cargo operations do not appear to have been based to any material extent on the expectation that the Government would underwrite the losses sustained, but rather upon a determination that each carrier's long-run position in the industry would best be served by experimentation with cargo flights at this time even though temporary losses might be sustained.

In addition to the competition between the carriers certificated to transport persons, property, and mail and the certificated all-cargo carriers there has also been competition in property services resulting from the cargo operations of the irregular carriers. This competition, however, has not been as strong an influence in the domestic cargo field as in the domestic passenger field. As already pointed out, nearly three-fourths of the cargo ton-miles generated by the irregular carriers during 1951 were accounted for by international operations and only approximately one-fourth by domestic services. To the extent that cargo operations by irregular carriers have been and are a factor in the domestic field, the problems they pose are much the same as those presented in the passenger field; and as in the passenger field the role of the irregular carrier in domestic property transportation can be determined only after decision in the large irregular carrier investigation.

The fourth competitive influence in the domestic cargo field has been the indirect air carrier. Under the act, the Board's economic regulatory jurisdiction is not limited to those companies actually operating aircraft themselves but extends as well to companies indirectly engaging in air transportation by holding out their services to the general public as carriers of property which they move on the aircraft of the direct air carriers. As in the case of direct carriers, indirect carriers may not engage in air transportation under the act without first obtaining authorization from the Board to do so.

Prior to 1948 only one company, Railway Express Agency, was authorized to engage in air transportation as an indirect air carrier. However, in September 1948, the Board in its decision in the *Air Freight Forwarder Case* (9 C. A. B. 473), acting pursuant to the special provisions of section 1 (2) of the act relating to indirect air carriers relieved such carriers from the requirement of obtaining certificates of public convenience and necessity to the extent necessary to permit the operation of air freight forwarder service. The Board there recognized once again the importance of the competitive element in air transport development when it stated:

The surface forwarder has always been subject to open and active competition, and if authorization is granted by the Board the competitive aspect will be an important factor in securing to the public service of the highest quality at reasonable rates. The forwarder, on the basis of the amounts he must pay the direct carriers, will evolve and publish tariffs of his own, setting out the rates at which he is willing to serve the public. The shipping public will be in a position to

compare the rates of the forwarder with the air freight rates of the direct carriers and, if the differential between the rate of the forwarder and the underlying carrier is too great, it is reasonable to conclude that the business will be transferred to the direct carriers. The ability of the air freight forwarder to continue in the business will be determined to a large extent by the character and cost of the services which he renders as compared to the character and cost of the services which is offered in the air freight operations of the direct air carriers. In addition there will be competition among the forwarders themselves. The fact that in this proceeding there are more than 70 applicants, many of whom have substantial finances with large organizations and ample facilities, is assurance that in air freight forwarding there will be the same type of active competition that has existed in the surface field.

In reaching its decision the Board also concluded that it should place no limitation on the number of air-freight forwarders who may operate nor upon the number of points between which air-freight-forwarder service may be rendered. Thus, in the field of air-freight forwarding today any person qualifying under the Board's exemption regulation may obtain a letter of registration and conduct this type of service.

It is clear that the rapid growth in air-cargo transportation that has come about since the war has been accompanied by a remarkable increase in competition. Since the certificated passenger carriers are all authorized to transport property and mail the growth of competition among them in domestic passenger services has been paralleled by intensified competition in the freight field. More important from a competitive standpoint have been the authorizations granted to persons whose single interest lies in air-cargo transportation and who, without the benefit of any form of Government subsidy, must conduct financially successful cargo operations if they are to survive. Today in the cargo field there is competition among the certificated carriers, the certificated all-cargo carriers, the irregular carriers engaged in cargo transportation, the indirect carriers, and between each of these various groups.

This competition does not exist in name only but is, in fact, of extreme intensity. There is no escaping the fact that the cargo rate reductions which brought about the air-freight-rate investigation were prompted in large part by competitive considerations, and it would be unreasonable to conclude other than that this competition played a major role in speeding the advent of flights carrying cargo only and in the institution of such flights on all major cargo runs.

The Board believes that this increase in competition—an increase not marked by uncontrolled entry into the field but by selective authorizations found to be warranted under the standards of the act—has had a salutary effect from the standpoint of both the public and the air-transport industry and has played an important role in raising domestic-property transportation (including both air freight and air express) from an insignificant 218,242 ton-miles in 1938 to 293,453,282 ton-miles in 1951. Indicative of the impact of the new competitive services is the fact that during 1951, in scheduled services the freight ton-miles of the certificated all-cargo carriers were only 25 percent less than the total freight ton-miles of all domestic trunk line carriers.

V. International and Territorial Services

Although the standards set forth by Congress in the declaration of policy of the act to guide the Board in determining issues of public

convenience and necessity and public interest apply to international and domestic air services, certain inherent characteristics of international air transport cast it in a different mold from its domestic counterpart. Even in the international field Congress prohibited the establishment of international air services by United States or foreign-flag carriers unless the companies first obtain appropriate authority from the Board in the form of a certificate of public convenience and necessity or a foreign-air-carrier permit. However, recognizing the peculiar nature of international air services and their vital importance to the welfare of the country, Congress inverted the usual administrative process and provided that instead of acting independently of executive control the Board in this field should be subordinated to it.

The act provides that when a foreign carrier seeks a permit or a citizen of the United States requests authority by certificate to engage in overseas or foreign air transportation a copy of the application must be transmitted to the President before hearing, and any decision, either to grant or deny, must be submitted to the President before publication and is unconditionally subject to the President's approval. Under this statutory scheme, the Board's decision is nothing more than a recommendation to the President and it is he who determines finally whether he will approve the Board's recommendation or will direct the Board to make changes in its decision to conform to the conclusions he has reached. Furthermore, the President is not required to set forth the reasons prompting him to agree or disagree with the recommendations of the Board and he has in a number of cases directed the taking of action contrary to that recommended by the Board with the simple statement that his action was based on matters peculiarly within his province as Chief Executive. And the President's decision is not subject to judicial review.

The reason for this unusual statutory scheme with its unique relationship between the President and the Board is not difficult to discover. To a much greater extent than in the setting up of domestic routes, the establishment of international air services extends beyond the question of ordinary commercial needs and cuts deeply across the national defense of the country and the conduct of our foreign relations. For example, even in times of peace the Board has established international routes which could not be justified on economic grounds alone where the Military Establishment has strongly urged such action as necessary to the national defense. *South Atlantic Route Case* (7 C. A. B. 285 (1946)). And, of course, the national defense implications of our international air services are not limited to routes established solely on the basis of defense considerations.

Equally important are the foreign-relations aspects of the regulation of international air transport. Since the operation of international air routes necessarily involves the securing of operating and landing rights in other sovereign countries, most of which have their own airlines which they desire to protect from United States competition and to obtain operating rights abroad, the give and take of international negotiations necessarily plays an important part in influencing the international air route pattern. As a practical matter, the necessity of obtaining landing rights abroad imposes a definite limitation on the number of competing United States carriers that can operate in a given market, irrespective of the volume of competitive services that economic considerations might dictate. For unlike the

philosophy of the United States Government which favors competition in air transportation, many foreign countries have always leaned toward a more restrictive policy favoring a chosen instrument and have not been adverse to pooling, sharing of markets, and other activities characteristic of cartels. As a direct result, those countries have been reluctant to grant operating rights in their territory to United States carriers exceeding in number their own carriers. These considerations of international relations are not limited to aviation matters alone, for most foreign countries view their air carriers operating routes abroad as symbols of national prestige. Consequently, the relations that exist in the field of aviation permeate the still larger and more important sphere of foreign relations in general.

The importance of this foreign-relations factor was expressly recognized in those sections of the act which provide that the Secretary of State shall advise the Board of and consult with it concerning the negotiation of agreements with foreign governments for the establishment or development of air navigation, including routes and services; and requiring the Board in exercising and performing its powers and duties under the act to do so consistently with any obligation assumed by the United States in any treaty, convention, or agreement that may be in force between the United States and a foreign country.

In addition to considerations vitally affecting the broad public welfare, still other matters tend to distinguish international from domestic aviation and to raise problems calling for different treatment in their regulation. Of significance is the more circumscribed power of the Board in the international field to control by administrative fiat areas of real public concern. Under the act the Board can compel adequate service and prescribe just and reasonable rates, fares, and charges in domestic air transportation. No similar authority exists in the interntional field, and control of service and fares must be insured by other means. Even from a standpoint of purely economic considerations, services within the United States and services to foreign countries show marked differences. Not only is the traffic potential in the international field more limited than on the high-density domestic routes, but in most instances the available traffic is subject to active competition from foreign carriers. In addition, international services are more costly to operate than domestic routes. These various differences might be elaborated on but the foregoing examples are sufficient to illustrate the peculiar problems that have had to be met in considering the role of competition in international aviation.

The Board in its decisions dealing with international air transport and the President in his actions on those decisions have from the beginning taken the position that limited but balanced competition should exist between United States air carriers on the major international routes. In line with that policy, both have consistently opposed the various bills that have from time to time been introduced in Congress proposing the substitution in the international field of a single company—a "chosen instrument"—for the competitive services authorized under the act.

In its first decision in an international-route case the Board in awarding Pan American a certificate to operate trans-Atlantic services reflected this philosophy when it refused to permit Pan American to utilize all of the frequencies allotted to American carriers pursuant to an agreement between the United States and Great Britain, even

though no other United States operator was serving the route. The Board there pointed out that since under the act it must take into consideration in determining the needs of the public convenience and necessity the factor of competition to the extent necessary to assure the sound development of an adequate air-transportation system, if any one carrier had authority to utilize landing rights to the extent of the total number available to the United States, any competition which might in the future be found necessary would probably be impossible of attainment (*Pan American Airways Company, Transatlantic Operations*, 1 C. A. A. 118 (1939)).

This policy of competition unfolded still further in 1940 when the Board issued a certificate to American Export Airlines authorizing it to engage in air transportation on a temporary basis between the United States and Portugal, *American Export Airlines, Transatlantic Service* (2 C. A. B. 16 (1940)), and reached full expression following the war when in 1946 the Board in the *North Atlantic Route Case* (6 C. A. B. 319 (1946)), extended American Export Airlines' routes to London and beyond there to the low countries, Scandinavia, Germany, and Russia; extended Pan American's route from the British Isles through southeastern Europe and the Middle East to India; and authorized Trans-World Airlines to operate a route between the United States, France, Italy, north Africa, to the Middle East and India.

In the first of these decisions, the Board after stating that competition was not mandatory in relation to any particular route or service and that it lay in the Board's discretion to decide the issue in accordance with the particular circumstances of each case, outlined certain specific considerations that led it to end Pan American's monopoly in trans-Atlantic service. Among other things, the Board pointed out that there was sufficient available traffic at that time for two successful operators in the trans-Atlantic field; that competition not only would result in improved service but would also act as a stimulus to a search for better equipment and operating methods; and that the national defense would benefit from such competition since the research and development by foreign competitors would not be available to the national defense of this country.

These reasons were spelled out more completely in the second decision when the Board said:

> We recognize that competition from foreign services will develop on important routes. Such foreign competition, however, is not an adequate reason for abandoning the present statutory policy of this Government. The greatest gain from competition, whether actual or potential, is the stimulus to devise and experiment with new operating techniques and new equipment, to develop new means of acquiring and promoting business, including the rendering of better service to the customer and to the country, and to afford the Government better yardsticks by which the performance of United States operators can be measured. No matter how many foreign competitors may be in the field, their research and development will not be fully available to our industry. The technical advancement of aircraft that may be stimulated by competition, together with progressive and competitive engineering and research associated therewith, will contribute to the peacetime advancement and maintenance of the aircraft-manufacturing industry.
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> As in the domestic system, regulation might result in there being only one carrier in a particular traffic area, but to carry regulation to such an extreme as to place only one carrier in the entire European area would result in depriving the United States of the opportunity of attaining the maximum development

of its foreign air-transportation system. No effective substitute for healthy competition as a stimulus to progress and efficiency can be found in monopoly. The stimulus to an imaginative management that results from the competitive efforts of business rivals to secure patronage and trade cannot be matched as a motivating force for the public welfare even by the private profit incentive, for the latter might be satisfied with moderate traffic at high rates while the public welfare would require mass transportation at lower fares and charges. The improvements which flow from a competitive service cannot be decreed by administrative fiat. The presence of more than one United States company in the European area should provide a broader and more intensive development of equipment, facilities, and services than would be achieved by one company.

In a series of decisions following the North Atlantic Route case the Board certificated additional United States air carriers to operate international services in various parts of the world, many of them competitive in important respects with the services then being operated by Pan American and Pan American-Grace Airways. The *Latin American Air Service Case* (6 C. A. B. 857 (1946)), granted new routes in the Caribbean, Central America, and South America to several other United States-flag carriers. Braniff Airways, Inc., was certificated to operate to Mexico, Cuba, the Canal Zone, and South America; Chicago & Southern Air Lines, Inc., to Carcacas, Venezuela, San Juan, and other points in the Caribbean; Western Air Lines, Inc., to Mexico City; Eastern Air Lines, Inc., to Mexico City and San Juan; National Airlines, Inc., to Habana; and Colonial Airlines, Inc., to Bermuda. These extensions were accompanied by the grant of additional authorizations to both Pan American and Panagra for service in the Latin-American area. In the *Pacific Case* (7 C. A. B. 209, 599 (1946)), Northwest Airlines, Inc., was certificated to operate from the United States to the Orient via Alaskan points; and Pan American was simultaneously authorized to extend its Central Pacific route from Midway to Tokyo, Shanghai, and Hong Kong and from Manila to Saigon, Singapore, and Batavia. This route was further extended from Hong Kong, Indochina, and India to connect with Pan American's North Atlantic route thereby establishing the first one-carrier around-the-world service. Accompanying this latter action was an extension of TWA's North Atlantic route from India to Shanghai to connect with the newly authorized route of Northwest Airlines, in effect establishing a second United States around-the-world service. Only recently the Board, with the approval of the President, issued a certificate of public convenience and necessity to an irregular carrier authorizing it to engage in scheduled air transportation of property only over a route between the United States and Colombia via Cuba and Central-American points.

Because the flow of traffic over the various international routes is considerably lighter than the traffic over the domestic routes and such routes are more expensive to operate, there is less competition among United States carriers in the international field than domestically. In certain areas having only a limited traffic potential competitive services have not been authorized. Thus, Pan American is the only United States airline operating services to the Union of South Africa and to Australia and New Zealand. But unlike the prewar situation in which virtually all United States international traffic was handled by a single system the Board has permitted broad-scale entry of additional companies in the international market through the extension of the routes of domestic carriers. Typically, competition has been established between major terminals such as New York and London; New York and

Buenos Aires; the west coast and Shanghai, Tokyo, and Manila; etc. Competition on a point-to-point basis has been the exception rather than the rule.

As already pointed out competition in scheduled services has not been limited to that between United States air carriers. Virtually every foreign nation of any size has an airline owned or controlled by the government of that country which has set out to compete for traffic over the major international air routes. The extent of those operations is indicated by the fact that at the present time 11 European air carriers are authorized to operate over the all-important North Atlantic route, 25 Latin-American carriers are authorized to conduct services between the United States and Latin America, and an additional 4 foreign carriers have authority to link the United States and various points in Asia and Australia. Utilizing equipment identical with the most modern types operated by United States companies and backed by substantial financial assistance from their own governments these carriers are an important element in the competitive picture in international operations.

Air transportation between the United States and its Territories and within these Territories occupies its own peculiar place, differing in substantial respects from both domestic and foreign services. Moreover, the problems that must be coped with in regulating Territorial services differ widely as between the various Territories.

The Alaskan topography, location of its population, nature of its economy, its strategic importance, and the lack of other means of transportation, create a need for air service there out of all proportion to its population. Even when the act was passed a large number of air carriers, most of them utilizing small aircraft, were operating within the Territory. However, perhaps to an even greater extent than domestically, conditions were chaotic. Financial weakness among the operators was characteristic; duplication of routes existed in areas where duplication was not economically justified; inadequate navigational facilities and landing areas severely hampered operations; and an almost complete lack of statistical information made the planning of a sound course of regulation virtually impossible.

Faced with this situation, the Board could only feel its way along. At the outset, intra-Alaskan services were permitted to continue by a blanket exemption from the economic provisions of the act. Subsequently, after a series of hearings the Board, with the approval of the President, issued certificates to 21 carriers authorizing them to engage in air transportation within Alaska with respect to persons and property, and in a few instances mail (*Alaska Air Transportation Investigation*, 3 C. A. B. 804 (1942)).

These certificate authorizations differed from the certificates issued domestically in that they provided for two classes of routes. The first, covering so-called regular routes, provided for fixed terminal and intermediate points similar to the authorizations contained in domestic certificates. However, even here the Alaskan certificates were somewhat broader than their domestic counterparts, since in addition to receiving the right to serve the points specifically named, the carriers were authorized to serve any other points situated in the area which ordinarily would be served by the regular route.

The second class was comprised of irregular routes, which were designations of geographical areas within which a particular carrier might, without further authorization from the Board, conduct operations in accordance with sporadic traffic demands and build up new regular-route service.

Simultaneously, the Board by regulation provided that the Alaskan carriers might make charter trips and conduct special services (1) between points on routes named in their certificates; and (2) to or from any point in the Territory, provided that such trips originate at or are destined to a point on a route (regular or irregular) the carrier is authorized to serve. To prevent wasteful service and destructive competition, the Board imposed a requirement that charter trips and special services to off-route points must be casual, occasional, or infrequent and must not be conducted in such a manner as to result in establishing a regular or scheduled service. These special authorizations have continued in effect up to the present time.

The war and the vital role assumed by the Territory from a military standpoint gave great impetus to the development of aviation within Alaska. With a majority of the certificated carriers engaged in performing services directly for the Armed Forces or for various governmental or civilian agencies engaged in military construction projects, there sprang up a number of new carriers who began engaging in air transportation without any authority from the Board. At that time it seemed undesirable to institute any investigation or proceeding for strict enforcement of the act because of the possibility that such action might have a detrimental effect upon war activities within the Territory. However, by 1945 these conditions no longer prevailed and the Board concluded that continued service by the forty-odd unauthorized operators, in addition to the service provided by the certificated carriers, was not warranted unless required by the public convenience and necessity.

In order that the public need for additional service could be investigated in accordance with the requirements of the act, and to establish clearly that no new operator could inaugurate service without obtaining prior approval under the act, the Board in July 1945 adopted a regulation providing that any operator who engaged in service during the 6 months ending March 31, 1945, without authorization from the Board, and who filed an application with the Board on or before September 15, 1945, could continue service until the application was disposed of.

The next major step in the regulation of aviation in Alaska came in 1948 when the Board by exemption established a new class of carriers designated as "Alaska Pilot Owners." This exemption enabled qualified pilots using small aircraft to perform specialized services in air transportation within the Territory of Alaska without the necessity of first obtaining a certificate of public convenience and necessity, or of complying with certain other provisions of the act. However, the Pilot Owners were precluded from operating between points on any route on which carriers holding certificates of public convenience and necessity undertake to provide service on an aggregate of three or more scheduled flights weekly. The Board's action stemmed largely from the realization that the peculiar conditions existing in Alaska justified the ready inauguration of specialized services for such purposes as fishing, hunting, sightseeing, or transporting trappers, prospectors,

fur buyers, miners, etc., to uninhabited places or places not usually receiving air services by the certificated carriers and represented an attempt by the Board to bring about a more rational system of air transportation consisting of only two major classes—the certificated carriers and the Alaska Pilot Owners. Originally established on a temporary basis, the exemption regulation has been extended from time to time and is still in effect.

During the time that changes were being made in the Board's general regulations authorizing services by Alaskan carriers, changes were likewise taking place in the authorizations of the certificated carriers. In several instances groups of certificated carriers consolidated or merged their properties into single companies of larger size. As a result, the number of holders of certificates of public convenience and necessity decreased steadily. Also, certificated carriers originally authorized to transport persons and property only were permitted to carry mail and numerous adjustments of, and additions to the prewar routes were made in an effort to bring the outstanding authorizations into harmony with the operations actually needed to meet changing needs of the Territory. In addition, special exemptions were given to a number of carriers who established a need for certain specialized types of service but whose proposed operations were not readily adaptable to authorization by certificates of public convenience and necessity.

These changes resulted in an air transport system for Alaska consisting at the end of 1951 of 13 carriers certificated to carry persons, property, and mail, 96 carriers authorized to operate as Alaskan Pilot Owners, and 10 noncertificated operators. Between them these carriers offered regular services between all major points within the Territory, which were supplemented by the specialized services of the carriers operating pursuant to exemption. Competition, which in the early days of the act had been so severe as to threaten the existence of many of the carriers, has been brought within more reasonable bounds but the situation in the Territory is still highly competitive.

Although the absence of reporting requirements for Alaskan carriers during the early days of the act render it impossible to mark out precisely the growth that has actually occurred in the Territory since 1938, the volume of service that is now being rendered is indicated by the fact that the carriers operating within Alaska during 1950 reported operating revenues of more than $10,000,000 and transported more than 173,000 passengers. However, despite this large-scale business, and the fact that a large number of the carriers received no mail compensation, approximately $2,900,000 of the total revenues of $10,000,000 was comprised of mail pay and a great many of the certificated Alaskan carriers had pending before the Board requests for still further increases in mail pay which they claimed were essential to their continued successful operation.

In Hawaii, as in Alaska, the geography of the Territory has made air travel of extreme importance. The various islands, all of which have a strong community of interest with Honolulu, are separated by water and with boat transportation extremely slow the islands, too, have generated a volume of traffic far out of proportion to their population. At the time of the passage of the act, Hawaiian Airlines was operating scheduled services between the various islands and was granted a certificate of public convenience and necessity under the grandfather provisions of the act. It remained the sole scheduled

carrier in Hawaii until 1949 when the Board issued Trans-Pacific Airlines a certificate authorizing it to engage in the air transportation of persons and property over routes largely paralleling those of Hawaiian. This award was in large part predicated on the Board's belief that the sound development of air transportation within Hawaii required that competitive service be established there. In addition to the services of the certificated carriers, a substantial volume of transportation by irregular carriers had been carried on within the islands. Because of the limited number of points requiring service and the fact that in most instances a single point will serve an entire island, it was virtually impossible for an irregular carrier to operate without exceeding the frequency and regularity limitations of the Board's irregular exemption. However, certain irregular carriers have been given special exemption authorizations and are operating services there today.

Within Puerto Rico, the situation is different from that in the other two Territories and there has been a much smaller demand for air service between points on the island. In fact, traffic has not been sufficient to date to justify the authorization of more than one service within the island.

Equally important as air transportation within the Territories has been the operation of air services linking the Territories and the United States. At the time the act was passed air services were already being conducted between the United States and Puerto Rico and the United States and Hawaii. Shortly thereafter Pan American Airways was authorized to inaugurate service between the United States and Alaska. This situation remained the same until 1946 when the Board authorized an additional carrier to render service between the United States and Puerto Rico and granted Pan American a direct route between New York and Puerto Rico in addition to its existing Miami-Puerto Rico operation. Since that time two additional carriers have been certificated to operate between the United States and Puerto Rico—one conducting passenger, property, and mail service, and the other rendering cargo service only. Competitive services have been authorized between California and Hawaii and the Pacific Northwest and Hawaii and three additional carriers have been certificated to render service between the United States and Alaska.

Irregular carriers have also played a large part in the operation of services between the United States and its Territories. In fact, these particular markets have been among the major ones tapped by the irregular carriers. In 1950, the United States-Alaska, New York-Florida-Puerto Rico, and United States-Hawaii segments were among the top nine segments in terms of number of flights operated by irregular carriers. The role of the irregular carriers in these markets is an issue in the large irregular air carrier investigation now pending before the Board.

Looking at the situation as it exists today, it is clear that with the exception of intra-Territorial service within Puerto Rico, there exists a high degree of competition both within the Territories and between the Territories and the United States.[18] The intensity of this competition is attested by the advertising campaigns of the carriers serving

[18] Pursuant to the President's directive in the United States-Alaska Service case, an investigation reviewing the entire problem of United States-Alaska service will be begun in the fall of 1952.

the markets, by the institution of coach services and special fares designed to attract traffic, and the numerous complaints that have been filed with the Board by both certificated and noncertificated carriers charging that new fares put in by their competitors were unreasonable. Between the United States and Alaska alone, at the end of 1951, four certificated carriers were providing 53 round trips a week. Fourteen of these were exclusively cargo schedules, and the remainder provided a capacity for about 2,000 passengers in each direction per week.

VI. Intercorporate Relations

The authorization of new competitive services found to be required by the public convenience and necessity would hardly be more than an idle gesture were it not linked with some means of protecting and preserving the competition necessary to the civil aviation program of the Nation already in existence. Congress expressly recognized this in those provisions of the act previously referred to which prohibit mergers, consolidations, and acquisitions of control; cooperative working agreements; and interlocking relationships unless these intercorporate relations are approved by the Board as being in the public interest as this term is described by the declaration of policy of the act. The congressional intent in including this requirement was not to prohibit all intercorporate relations but rather was to subject them to the surveillance necessary to prevent the stifling of that competition essential to the continued development of air transportation. In fact, in order to promote relationships that meet the test of public interest, Congress went so far as to provide that when relationships subject to the Board's jurisdiction are approved by it the carriers concerned shall be exempted from the provisions of the antitrust laws.

Probably the most important and far-reaching problems in the field of intercorporate relations arise in connection with proposals which would result in the elimination of an existing carrier through consolidation or merger, or the acquisition of control of such carrier by some other air carrier, surface carrier, or by a person engaged in another phase of aeronautics. So important did Congress consider this problem from a competitive standpoint that it was not content to rely on the guides set forth in the declaration of policy of the act as the sole determinant of Board action. In addition, it specifically included a prohibition against the approval of any consolidation, merger, or acquisition of control which would result in creating a monopoly and thereby restrain competition or jeopardize another carrier not a party to the transaction. A second proviso, imposed still more stringent restrictions on transactions of this type where the applicant for approval was a carrier other than an air carrier by providing that in such cases the Board should not enter an order of approval unless it finds that the transaction will promote the public interest by enabling the surface carrier to use aircraft to public advantage in its operations and will not restrain competition.

In dealing with applications seeking approval of consolidations, mergers, and acquisitions of control the Board has applied the congressional mandate strictly and has refused to approve those transactions that would substantially lessen competition or materially upset the competitive balance necessary to achieve the fundamental purposes of the act. The Board's policy is well spelled out in its first

decision passing upon a matter of this type where it denied a request of United Air Lines to acquire Western Air Express Corporation. *Acquisition of Western A. E. by United A. L.* (1 C. A. A. 739 (1940)). The carriers there urged that the merger would further the public interest by improving United's transcontinental service, by effectuating economy and efficiency, and by bettering, and consequently promoting, local traffic. The Board recognized that the merger would improve transcontinental passenger service. However, it pointed out that the combination would give United direct access to the entire Pacific coast and would greatly enhance United's advantage in the market with adverse effects upon its competitors. Moreover, the Board concluded that the merger would permit United to take over the only independent north-south route west of the Rocky Mountains. In denying the proposed acquisition the Board stated:

> It is the concentration of ownership and control which is fatal to the operation of a competitive economy. To allow one air carrier to obtain control of air transportation in the west coast area greatly in excess of that possessed by competitors would, in our opinion, seriously endanger the development of a properly balanced air transportation system in this region; and the elimination of the only independent north and south air carrier west of the Rocky Mountains might be expected to retard the promotion of air travel in this direction.

This philosophy has been followed in subsequent decisions of the Board on applications by air carriers for approval of transactions under section 408 of the act. Thus in disapproving the acquisition of Mid-Continent Airlines by American Airlines, the Board, although recognizing that the route systems of the two carriers were not competitive (and in part basing its decision on the fact that the two routes would not form an integrated system), pointed out that American, because of its size and widespread routes, would be placed at a competitive advantage over smaller carriers operating in the area served by Mid-Continent.

As a result of this unwillingness to sanction acquisitions of control that threaten to diminish competition or throw the competitive scales out of balance, the transactions that have been approved by the Board in the domestic field have been those that joined noncompeting companies or companies whose routes were largely complementary and with the competition between them of no great significance. In its treatment of acquisitions of control by air carriers outside the territorial United States the principles applied to the domestic cases have not been applied with quite the same strictness. Actually, except for transactions affecting Alaskan air carriers there have been presented to the Board relatively few cases involving the acquisition of control of air carriers operating in overseas or foreign air transportation. The most important of these cases undoubtedly was that in which Pan American Airways was authorized to acquire control of American Overseas Airlines, one of the three American carriers authorized to operate between the United States and Europe and a competitor of Pan American for traffic to the London gateway. A three-member majority of the Board recommended that the acquisition be disapproved; however, the President directed approval but simultaneously concluded that Pan American which under its certificate and that of American Overseas might serve London and Frankfurt should also be authorized to serve Paris, and that TWA which was authorized to serve Paris should be certificated to serve London and Frankfurt as

well. Thus, even though the merger did eliminate one of the independent carriers which was competitive with Pan American it increased competition to the points which the President concluded were the most important cities in the European area from a standpoint of air transportation.

A somewhat different situation has pertained in Alaska due to the fact that at the time the act was passed there were a great many carriers, many of them so small that they were unable to perform the services necessary to meet the needs of the Territory and that competition between these carriers existed over segments which lacked sufficient traffic potential to support competing services. As a result in Alaska the Board has approved a number of mergers and acquisitions of control that eliminated routes which at least on their face appeared to be competitive. A closer examination of the cases, however, discloses that in many instances this competition was illusory since the acquired carrier had ceased operations or that carrier would have been unable to continue to render service over both the competitive and noncompetitive portions of its route.

The more stringent congressional policy applicable to surface carrier applicants who seek to acquire air carriers has also been applied strictly by the Board. In every case of this type that has been decided approval has been refused. Moreover, even where a surface carrier has applied for a certificate of public convenience and necessity in its own name, thereby avoiding a technical control relationship within the purview of section 408 of the act, the Board has applied the tests of the latter section as an element of public convenience and necessity and in every case has denied the application.

It would be erroneous to view the authority of the Board over mergers as nothing more than a negative power granted for the sole purpose of preventing the lessening of airline competition by the elimination of independent operators. For consolidations, mergers, and acquisitions of control wisely chosen can be powerful instruments in insuring the continued development of the air transportation system. Deficiencies in the air-route pattern of the country, stemming both from the system of routes established under the grandfather provisions of the act and by subsequent Board authorizations, have been recognized from the early days of the act. However, these deficiencies came into sharp focus in 1947 following the rapid deterioration in the financial situation of the air carriers and pointed up the necessity of formulating an over-all route plan to serve as the pattern for future development of the airline network. This need was high-lighted by growing concern over the heavy subsidy mail pay requirements of most of the certificated carriers, the competitive unbalance among the carriers, and the desirability of lowering unit costs as a basis of bringing about fare reductions and making air transportation available to a larger segment of the public. This need was recognized by the Board and was emphasized by both the President's Air Policy Commission and the Congressional Aviation Policy Board which rendered reports on national aviation policy in 1948.

Any proposal for a national route plan taking into account the overall needs of the country must have as a vital ingredient, the possibility of mergers which will achieve a system of carriers whose size and other characteristics will permit more uniform cost levels; will avoid excessive competition detrimental to the system as a whole but at the

same time preserve existing competition and increase the effectiveness of it; will improve service to the public through combinations of carriers whose routes logically integrate. For some period of time now the Board has given consideration to possible mergers that would achieve the foregoing objectives and has from time to time urged carriers to take steps to bring about such combinations. Only recently such a combination has been voluntarily proposed by the carriers and approved by the Board in the consolidation of Braniff Airways and Mid-Continent Airlines. In addition, there are now pending before the Board a number of other voluntary agreements proposing combinations between existing carriers and investigations instituted by the Board on its own initiative directed to determining whether certain other combinations, not the subject of specific agreements between the carriers, would be in the public interest. It is the Board's intention to continue to pursue this policy of searching out and encouraging those transactions that will help to achieve the policies set forth by Congress in the act.

The policy that has been applied by the Board with respect to consolidation, mergers, and acquisitions of control has also been applied to other intercorporate relationships. The Board has consistently refused to approve interlocking directorates between air carriers, between air carriers and other common carriers, and between air carriers and persons engaged in some other phase of aeronautics where such relationships gave rise to the posssibility of reducing competition or of interfering with the freedom of the air carrier to take the action best calculated to promote its well-being and the well-being of the air transportation system as a whole. In the few cases involving such peculiar circumstances that the Board found the public-interest factors favoring approval outweighed harmful results that conceivably could result, it has carefully conditioned its approval in order that it might keep a continuous check on the relationship and take action disapproving should changed conditions actually bring about a situation that conflicted with the policies of the act.

The same caution has been exercised in dealing with cooperative working agreements subject to approval under section 412, although here the task has been more difficult since in many areas arrangements of this type can be extremely beneficial to the public and the transportation system as a whole. Domestically the agreements that have been approved have in the main been those which involved no threat to the competitive situation and merely offered a promise of savings and reductions in costs through joint action by a group of carriers. In the international field, however, the situation has been somewhat different. With more limited regulatory powers there than domestically, e. g., the lack of the power to control property rates of United States international carriers or to compel the rendereding of adequate service by them, and lacking comprehensive control over many of the activities of foreign air carriers with whom the United States international operators compete, the Board has utilized its control over cooperative working arrangements as a means of exercising more adequate regulatory jurisdiction in the international field. These activities have occurred primarily in connection with the International Air Transport Association, an association of all of the scheduled international carriers, both United States and foreign, which through res-

olutions joined in by all of its members sets the standards governing such important matters as passenger rates in the international field. However, even in this area the Board has exercised extreme caution and has hedged its approval of the arrangements embodied in the IATA resolutions with safeguards designed to avoid results that might be deleterious to the competitive situation of United States carriers and to maintain continuing control over the activities covered by the resolutions.

VII. Conclusion

During the 14 years that have elapsed since the Civil Aeronautics Act was passed, the air transportation system of the United States has grown from a relatively small industry to one which, while still not large by the standards of many other components of our industrial and transportation system, is an important factor in the over-all economy of the Nation. This growth has brought with it greater coverage, increased schedules, improved equipment, and more reliable service for the traveling public; it has simultaneously produced for the country at large a stable industry in sound financial condition, ready and able to meet the threefold demands of the commerce, the postal service, and the national defense set forth in the declaration of policy of the act.

In 1938 when the act became law scheduled air service was available to only 240 cities of the country and the total domestic route mileage of the services authorized was 39,000. The scope of overseas and foreign operations was even more limited with no services being conducted over the important North Atlantic trade route to Europe and only a single service across the Pacific reaching the Far East. By the close of 1951, the number of cities in the continental United States certificated for scheduled trunk-line operations had increased to 416 and domestic trunk-line route mileage to 130,000. There were also in operation domestically a large number of new carriers authorized to conduct local services over nearly 28,000 miles of routes serving some 560 communities and several new all-cargo carriers with certificates permitting the operation of scheduled cargo services over routes blanketing the major freight-producing points of the Nation. In the international field, certificated carriers were offering scheduled services linking the United States with all of its Territories and possessions, and with virtually every foreign country.

This increase in the coverage of the airline network, as impressive as it is, fails to give an adequate picture of the growth that has taken place. Many of the cities certificated in 1938 have since been given new service by additional carriers. Scheduled frequency has increased greatly and today on such important runs as that between New York and Washington the certificated carriers are operating approximately 70 round trips daily. Moreover, this service is being offered with modern equipment affording the maximum in speed, comfort, and safety. Equally important, the price at which the public can purchase this transportation is considerably less than it was in 1938 and on a number of the more important route segments is available on a coach basis at fares as low as 4 cents per mile. The volume of service available is indicated by the fact that in their combined operations the certificated carriers in their scheduled operations at home and abroad had a total in 1951 of 2,752,000,000 available ton-miles. The public re-

sponse to this improved service is reflected by the increase in number of revenue passengers annually from 1,306,000 in 1938 to 24,670,000 in 1951, a rise in revenue passenger miles from 532,052,000 to over 13 billion, and an increase in express and freight ton-miles from 2,182,000 to 292,453,000.

The expansion that has occurred has both made possible an impressive increase in the amount and intensity of competition in air transportation and, in the opinion of the Board, has at the same time been stimulated by that competition. Where in the 1940–41 period of the 100 city pairs ranking highest in interstation passenger miles only 20 percent were competitively served, today 76 have competitive services—in many cases by three or more carriers. In the overseas and foreign field similar increases in competition have taken place. For example, of the 50 foreign points producing the most traffic in 1951 only 13 were certificated in 1940, and none of them received competitive service. By 1951, however, 7 of those 13 points, or over 53 percent received competitive service from United States carriers. In addition, of the 37 foreign points certificated since 1940 which make up the remainder of the leading 50 cities, 13.5 percent are competitive. If the competitive services of foreign carriers are taken into account these figures become still larger. A similar increase in competition is shown for the top 15 pairs of points in overseas air transportation. Of the 10 certificated in 1940 none had competitive service. By 1951, six had such service. Of the five certificated since that time three also had competitive service.

As might be expected in any instance of such tremendous growth in the short space of 15 unsettled and rapidly changing years, the carriers have from time to time suffered growing pains and the state of the industry has shown wide fluctuations. However, today the airline industry of the United States is in a sound financial position and possesses the strength and stability to meet the present and future demands of the country that may be made upon it. During the calendar year 1951, the certificated carriers as a group had total transportation revenues of almost $1 billion, and although some of the existing carriers still obtain a substantial part of their revenues from the transportation of mail, there has been a steady rise in the percentage of total income accounted for by commercial revenues from the transportation of persons and cargo. In 1938, nonmail revenues accounted for only 63 percent of the total revenues of the domestic carriers and 43 percent for international operators; by 1951 those figures had increased to 94 percent for the domestic trunklines and to 89 percent for the overseas and foreign operators. There has also been encouraging progress toward commercial self-sufficiency with an increasing proportion of total mail payments representing fair compensation to the carrier for the actual cost of transporting the mail. Today a number of our domestic trunk-line carriers receive no Government subsidy. The Board sees as one of its major regulatory responsibilities in the future the encouragement and development of civil aviation in such a manner as to preserve this financial strength and bring about an ever-decreasing need by the carriers for Government financial support.

A substantial part of the expansion of the airline network and growth of competition has come about through an extension of the routes of existing carriers. Under the congressional mandate con-

tained in the Civil Aeronautics Act, 18 companies were awarded certificates of public convenience and necessity authorizing them to conduct services over the routes they were operating at the time the act was passed. There was a great disparity between those carriers in size and financial strength, in the productivity of their routes, and in the costs at which they could operate their services, and it was clear that many of the companies under their then-existing route systems could not be expected to move far along the road to commercial self-sufficiency. It was also clear that many of them could not render effective competition with the larger and stronger carriers in markets where they were competitive. Thus a major problem that has faced the Board has been that of lessening the disparity between the various carriers and of bringing about a balanced system of companies with comparable unit costs. Substantial progress along this line has been accomplished. Yet much remains to be done. With the period of rapid expansion and the filling in of the airline network past, and with competition now so intense as to militate against wholesale new route awards, the Board has turned to the possibility of the merger and consolidation of smaller companies operating noncompetitive routes as a means of achieving the necessary balance.

The expansion, however, has by no means been accomplished solely through the grant of additional authorizations to existing carriers. Since the passage of the act certificates of public convenience and necessity have been issued to a large number of local service carriers, three helicopter operators, and six carriers conducting cargo-only operations. A few of these companies have fallen by the wayside, others that were granted temporary authorization have failed to establish that their certificates should be renewed for additional periods, and still others have been permitted to merge or consolidate with other companies to achieve better and more economical service. However, since none of the foregoing companies had ever before held certificates of public convenience and necessity the fact remains that during its existence the Board has authorized new operators in numbers exceeding those in existence at the time the act was passed.

With an airline network as comprehensive as that now in existence in the domestic, overseas, and foreign field and offering competition in the major competitive areas it is likely that there will be few, if any, opportunities in the foreseeable future for the entry of new companies proposing to operate services of the same nature and type as those now conducted by existing carriers and largely duplicating existing services. This is not to say that there will be no opportunities for new companies in air transportation. Within the past year, the Board has renewed for additional periods the certificates of several local service carriers and has authorized a new helicopter service in the New York City area. Within the past month, it has granted a certificate to a former irregular carrier authorizing it to engage in scheduled transportation of property only in the Caribbean area. In the future as in the past those new companies desiring to enter the field of air transportation which can establish that the services they propose will meet the tests set forth in the act and will result in promoting the development of an adequate air transportation system will receive appropriate authorization from the Board.

At the present time, the most likely areas for the authorization of new services by companies not now holding certificates are in the

United States-Europe-Middle East cargo case, the North Atlantic certificate renewal case, and the large irregular carrier investigation now pending before the Board, and in the United States-Alaska investigation that will be instituted in the fall of 1952. The first two of these cases involve the applications of three companies, two presently operating as large irregular carriers and the third a nonoperating company, for authority to conduct cargo-only service between the United States and points in Europe and the Middle East. The third embraces a Board investigation having as its purpose the development of an evidentiary record upon which the Board can reach a decision on all phases of the question of whether there is a need for the services of irregular air carriers supplementary to the existing certificated operations and, if so, what should be the nature and extent of the authorizations granted, the number of carriers that should be permitted to operate, etc. Practically every irregular air carrier is a party to this proceeding and most of them have had consolidated into it applications for the services they propose to operate. The fourth will be directed to a review of the entire problem of United States-Alaska air service. Hearings have already been held in the first two cases but they have been reopened for additional hearing. The third proceeding is set for hearing in the fall of 1952, and the last will be instituted at approximately the same time.

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